

**A QUASI EXPERIMENTAL STUDY TO ASSESS THE EFFECT OF
GARDENING THERAPY ON REDUCING THE LEVEL OF
STRESS AMONG BSc NURSING I YEAR STUDENTS IN
RASS ACADEMY COLLEGE OF NURSING
AT POOVANTHI**

Reg .No : 301531551

**A DISSERTATION SUBMITTED TO THE TAMILNADU DR.M.G.R
MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL FULFILLMENT
OF THE REQUIREMENT FOR THE DEGREE OF
MASTER OF SCIENCE IN NURSING
OCTOBER 2017**

CERTIFICATE

This is to certify that the dissertation entitled **A QUASI EXPERIMENTAL STUDY TO ASSESS THE EFFECT OF GARDENING THERAPY ON REDUCING THE LEVEL OF STRESS AMONG B.Sc NURSING I YEAR STUDENTS IN RASS ACADEMY COLLEGE OF NURSING AT POOVANTHI** is submitted to the faculty of nursing, The **Tamilnadu Dr M.G.R Medical University**, Chennai, by **Mrs.G.Selvi M.Sc (N) II YEAR** in partial fulfillment of the requirement for the degree of Master of science in Nursing. It is the bonafide work done by her and conclusions are her own. It is further certified that this dissertation (or) any part thereof has not formed the basis for award of any degree diploma (or) any title.

Prof.H.Ummul Hapipa,M.Sc(N)

Principal,

RASS Academy College of Nursing,

Poovanthi.

**A QUASI EXPERIMENTAL STUDY TO ASSESS THE EFFECT OF
GARDENING THERAPY ON REDUCING THE LEVEL OF
STRESS AMONG BSc NURSING I YEAR STUDENTS IN
RASS ACADEMY COLLEGE OF NURSING
AT POOVANTHI.**

APPROVED BY THE DISSERTATION COMMITTEE ON SEPTEMBER 2016

1.RESEARCH GUIDE : _____

PROF.H.UMMUL HAPIPA, M.Sc(N).,

Principal,

RASS Academy College of Nursing,

Poovanthi.

2. SPECIALITY GUIDE : _____

MS.NANZY FLOMINA, M.Sc(N).,

HOD of Mental Health Nursing

RASS Academy College of Nursing,

Poovanthi.

3.MEDICAL EXPERT : _____

Dr.RAMANUJAM ,M.B.B.S.,D.P.M.,MD.(Psy),FIPS

Professor of Psychiatry and Senior Surgeon

Vellammal Medical College Hospital

Madurai.

**A DISSERTATION SUBMITTED TO THE TAMILNADU DR.M.G.R
MEDICAL UNIVERSITY, CHENNAI, IN PARTIAL FULFILLMENT
OF THE REQUIREMENT FOR THE DEGREE OF
MASTER OF SCIENCE IN NURSING**

OCTOBER 2017

ACKNOWLEDGEMENT

I, the investigator to thank, praise and glorify the **ALMIGHTY GOD**, with all my heart, for the constant love, blessings, guidance and help rendered through any significant persons in my study period

I would like to extend my sincere thanks to **Mr.Ravisankar**, Chairman, RASS Academy College of Nursing, Poovanthi for his support and for providing the required facilities for the successful completion of this study.

I extent my heartfelt and sincere thanks to my research guide **Prof.Ummul Hapipa M.Sc(N)**.,Principal, RASS Academy College of Nursing, Poovanthi for a sedulous work, interest, cheerful approach, always with never ending willingness to provide expert guidance and suggestion to mould this study to the present form.

I extend my warmest thanks to associate **Prof. VijayaKamu**, M.Sc(N) ,Vice Principal, RASS Academy College of Nursing, Poovanthi for her expert guidance, valuable suggestion to bring this study in successful way.

I Sincere express my warmest thanks to my clinical specialty guide **Asst.Prof.Nanzy Flomina**, M.Sc (N), HOD, Mental Health Nursing, RASS Academy College of Nursing, Poovanthi. For her expert opinion guidance, tireless work, effort, interest, valuable suggestion and untiring help in completing the study in successful way.

I extend my heartfelt and sincere thanks to my medical guide my deep sense of gratitude to **Dr.Ramanujam**, M.B.B.S.,D.P.M.,MD.(Psy),FIPS., Psychiatrist for his help, valuable guidance and encouragement which enabled me to accomplish this task.

I express my warmest thanks to **Asso.Prof.Karthiha**, M.Sc(N) , Head of the Department of Community Health Nursing **Asso.Prof.Visalatchi**, M.Sc(N) , Head of the Department of Medical Surgical Nursing, **Asso.Prof.K.N.Sudha**, M.Sc(N) , Head of the Department of obstetrics and gynecological Nursing, **Asst.Prof.Selvalakshmi**, M.Sc(N) , Head of the Department of Child and Health Nursing, **Asst.Prof.Mrs.Kavitha**, M.Sc(N) , Department of Medical and Surgical Nursing, **Asst.Prof.Mrs.Kavitha**, M.Sc(N) , Department of obstetrics and gynecological Nursing, **Asst.Prof.Devika**, M.Sc(N) , Department of Medical and

Surgical Nursing RASS Academy College of Nursing for their cheerful approach, as their hands out stretched always with never ending willingness to provide guidance and suggestions.

My immense thanks to **Dr.varatharajanM.Sc(N).,M.Phil.,M.Ed., Ph,D(Edu).,** Professor Of statistics, RASS Academy College of nursing, poovanthi for his help in the statistical analysis of the data which is core of the study

I extend my sincere thanks to **Mrs.Jothimani, M.Com., M.L.I.C.,** Librarian, RASS Academy College of Nursing for their support throughout study.

I express my sincere thankful to **Mrs.Muthulakshmi, B.Sc.,** RASS Academy College of Nursing, for their help throughout study.

My sincere thanks to all the faculties of Nursing Department, and administrative department, RASS Academy College of Nursing for their help throughout the study

I express my sincere thanks to my lovable parents **Mr.T.Gurunathan, Mrs.Arputhavalli** for their prayer and encouragement in my study

I extend my sincere thanks to my aunt-uncle **Mrs.Chinnathai, Mr.Alagar raj** for their prayer, economical support and encouragement in my research.

I express my sincere thanks to my lovable sister **Ms. Karpagalakshmi** and my well-wishers **Mr.Velmurugan, Ms.Nagavalli, Ms.Kirthikadevi,** and **Ms.Sankareswari** for their blessings, support, and encouragement in my research.

Finally I dedicate this study to my beloved husband **Mr. Rajkumar.,** and My son **Master.R.Sakthi Saran,** for his encouragement, joy, and hope, love, instilled in me that made this work a reality.

TABLE OF CONTENT

CHAPTER	TITLE	PAGE NO
	ABSTRACT	
I	INTRODUCTION	1
	Need for the study	5
	Statement of the problem	8
	Objectives of the study	8
	Hypothesis	8
	Operational definition	9
	Assumption	9
	Delimitation	9
	Projected outcomes	9
	Conceptual framework	10
II	REVIEW OF LITERATURE	12
	Literature related to stress	12
	Literature related to other complementary therapy for reducing stress	13
	Literature related to gardening therapy to reduce stress.	15
III	METHODOLOGY	17
	Research Approach	17
	Research design	17
	Setting of the study	17
	Sample size	18
	Sampling technique	18
	Criteria for sample selection	18
	Description of the tool	19
	Pilot study	20
	Data collection procedure	20
	Plan for data analysis	20
	Protection of human rights	21
IV	ANALYSIS AND INTERPRETATION OF DATA	22
V	DISCUSSION, SUMMARY, CONCLUSION, IMPLICATION, LIMITATIONS & RECOMMENDATION	42
	REFERENCES	50
	APPENDIX	53

LIST OF TABLES

Table no	Title	Page no
1	Diagrammatic representation of design	17
2	Description of PSS	19
3	Frequency and percentage distribution of samples according to their demographic variables	23
4	Frequency and percentage distribution of samples according to their level of stress before the gardening therapy	34
5	Comparison of mean pre and post level of stress of the samples	36
6	Association of pre level of stress with their selected demographic variables of the samples	38

LIST OF FIGURES

Figure no	Figures	Page no
1	Conceptual framework based on modified shuffle Beam's CIPP Model	11
2	Distribution of samples according to their age	26
3	Distribution of samples according to their religion	26
4	Distribution of samples according to their types of family	27
5	Distribution of samples according to their place of residence	27
6	Distribution of samples according to their medium of language	28
7	Distribution of samples according to their interest in studying B.Sc (N)	28
8	Distribution of samples according to their health problem	29
9	Distribution of samples according to their friends status	29
10	Distribution of samples according to their adjustment problem	30
11	Distribution of samples according to their father's education	30
12	Distribution of samples according to their father's occupation	31
13	Distribution of samples according to their mother's education	31
14	Distribution of samples according to their mother's occupation	32
15	Distribution of samples according to the monthly income of their family	32
16	Distribution of samples according to the health status of their family members	33
17	Distribution of samples according to the social problems of their family	33
18	Distribution of samples according to their level of stress before and after gardening therapy	35
19	Comparison of mean pre and post level of stress of the samples	37

LIST OF APPENDIX

APPENDIX NO	TITLE	PAGE NO
I	TOOL: Section-A Demographic variable Section-B Perceived stress scale	53 55
II	Gardening therapy	56
III	Images of gardening therapy	60
IV	Copy of letter seeking permission to conduct the study	62
V	List of experts	63
VI	Copy of certification of Ethical committee	64
VII	Photographic evidence of therapy	66

ABSTRACT

The study on **A QUASI EXPERIMENTAL STUDY TO ASSESS THE EFFECT OF GARDENING THERAPY ON REDUCING THE LEVEL OF STRESS AMONG B.Sc(N) I YEAR STUDENTS IN RASS ACADEMY COLLEGE OF NURSING AT POOVANTHI** Was undertaken by Reg.No.3015331 during the year 2016-2017 in partial fulfillment of the requirement for the degree of Master of Science in Nursing at RASS Academy college of nursing, Poovanthi which is affiliated to The Tamilnadu Dr M.G.R Medical University, Chennai

Objectives: To assess the level of stress before the gardening therapy among B.Sc (N) students. To evaluate the effect of gardening therapy on reducing the level of stress among B.Sc (N) students .To determine the association between the pre level of stress with their selected demographic variables of B.Sc (N) I Year students.

Conceptual frame work: the study was based on shuffle beam's CIPP model.

Approach: An evaluatory approach was adopted for this study. **Design:** Pre experimental one group pre test post test design was taken for this study. **Sample**

size: the sample size was 50 B.sc (N) I Year students. **Sampling techniques:** The non probability Purposive sampling technique was used to select the samples with moderate to severe stress.

Methods of data collection procedure: Data was collected from the B.Sc(N) I Year students using perceived stress scale before and after the gardening therapy. The collected data were tabulated and analyzed by descriptive and inferential statistics. **Results:** The results shows, there was a significant difference between pre and post level of stress of the samples. The obtained t-value (21.25) was greater than the table value at 0.05 level of significance.

Conclusion: The gardening therapy was effective ($p < 0.05$) to reduce the level of stress among B.Sc (N) I Year students in RASS Academy College of Nursing at Poovanthi.

CHAPTER I

INTRODUCTION

Creating something I can use in the best stress reliever

Black lively

Background of the study:

Joyce Walker says young adulthood, the best years of your life. Life for many young people is a painful tug of war filled with mixed messages and conflicting demands from parents, teachers, friends and oneself. Growing up –negotiating a path between independence and reliance on others. It creates stress, and it can create serious damages for young people ill equipped to cope, communicate and solve problems. Stress is a serious problem where young people often rely on passive or negative behaviors in their attempts to deal with problems.

According to Christian nordgvisit (2015) stated that we generally use the word stress derived from latin word ‘stringi’ ‘which means to be drawn tight ‘ when we feel the everything seems to have become too much –we are overloaded and wonder whether we really can cope with the pressure placed upon us. Stress is the mental, physical, emotional reactions you experience as a result of demands of your life you must have experienced stress at one time or another.

Timorthy j legg(2016) stated that stress is a part of life & needs to be managed in order to be healthy & happy. Stress is your body’s response to certain situations. It’s subjective’ so something that is stressful for you may not be stressful for someone else. There are two types of stress **1.distress 2.eustress**. 1) **Distress** due to excess of adaptive demands placed upon us. The demands are so grant that they lead to bodily and mental damage. Distress can take various forms such as a) **acute stress**: is the most common type of stress. It’s your body’s immediate reaction to a new challenge, event or demand and it triggers your flight or flight response b) **episodic acute stress**: people who always seem to be having a crisis tend to have episodic acute stress. C) **Chronic stress**: can detrimental to your health as it can contribute to several serious

diseases & health risk. 2) **Eustress** is the optimal amount of stress which helps to promotes health and growth.

Jeanne segal (2017) Says that the situations and pressures that cause stress are known as stressors. We usually think of stressors as being external, including n exhausting work schedule or a rocky relationship, financial problem, lack of flexibility, Inability to accept uncertainty. However, anything that puts high demands on you can be stressful. stress is caused by external factors. Stress can also by internal or self-generated causes include when you worry excessively about something that may or may not happen, or have irrational, pessimistic thoughts like Rigid thinking, lack of flexibility, Negative self-talk, Unrealistic expectations

American safety (32%).psychological association (2011) survey reported that some stressors can trigger the life of an individual in which the common stressors such as money (75%),work (70%),the economy relationship (58%), family responsibilities (57%), health problems (53%), Personal concern (53%), job stability (49%) and housing cost (49%) have a personal impact on human being.

American psychological association (2013) stated that Younger peoples are more stressed than older people. They just don't know where they are going in life. They were sheltered in many ways with a lot of high expectation. USA today (2013) reported that 18-33 years of people are having the stress 20% extreme level 34% moderate 44% low level of stress. During young age college students spend most of their time on campus stressed out. Balancing classes, tests, projects, extra-curricular activities and work is enough to make anyone feel overwhelmed, especially with final exams right around the corner.

The most dangerous thing about stress is how easily it can creep up on you and how you get used to it. It starts to feels familiar - even normal. You don't notice how much it's affecting you, even as it takes a heavy toll. That's why it's important to be aware of the common warning signs and symptoms of stress overload. cognitive symptoms are Memory problems, Inability to concentrate, Poor judgment, Seeing only the negative, Anxious or racing thoughts, Constant worrying emotional symptoms Depression or general unhappiness „Anxiety and agitation, Moodiness, irritability, or anger, Feeling overwhelmed, Loneliness and isolation, Other mental or

emotional health problems, physical symptoms include Aches and pains, Diarrhea or constipation, Nausea, dizziness, Chest pain, rapid heart rate, Loss of sex drive, Frequent colds or flu behavioral symptoms are Eating more or less Sleeping too much or too little, Withdrawing from others, Procrastinating or neglecting responsibilities, Using alcohol, cigarettes, or drugs to relax, Nervous habits (e.g. nail biting, pacing).

American psychological association (2011) reported that stress can influence the emotional and physical habits of a person more over they have a reported that severe and prolonged stress may develop severe complication such as depression: feelings of extreme sadness, despair or inadequacy that last for a long time. Anxiety: constant feelings of unease, such as worry or fear that affect your daily life. In physical : individual more prone to get stroke: a serious condition where the blood supply to the brain is interrupted heart attack: a serious condition where the blood supply to the heart is blocked aneurysm: a serious condition that is caused by a weakness in the blood vessel wall, which forms a bulge in the blood vessel.

Albert (2017)states the stress management refers to the wide spectrum of techniques and psychotherapies aims at controlling a person's level of stress especially chronic stress usually for the purpose of improving every day functioning.

Deane alban (2013) stated that effective stress management can help counter the negative effects of stress in your life. There are many tress management techniques but some like counseling or biofeedback, require a long term commitment Many techniques are used for reducing stress such as social activity, cognitive therapy, conflict resolution cranial release techniques getting hobby meditation mind fullness music as s coping strategy deep breathing exercise progressive muscle relaxation, spending time with **nature and doing horticulture**, yoga, guided imagery. self hypnosis ,autogenic training, personal bio feedback emotional freedom technique, aromatherapy, enjoyable past times,

Gardening therapy it makes us more active gaining both physical and mental health benefits. Thrive, a charity which aims to help people suffering with mental issues or disabilities was established in 1978, and uses gardening to bring about positive changes to the lives of people who live with disabilities or ill health.

Anne Harding (2011) says that gardening therapy to reduce stress and promote the health and wellbeing. In the gardening therapy direct exposure to sunlight has been shown to increase serotonin in the brain. Serotonin is responsible for keeping our brain balanced and us feeling good not only does sunlight increase serotonin but it also increase melatonin which is the chemical in brain responsible for induce sleep..

Sophie loeb (2016) gardening therapy is the practice of engaging people in plant or gardening activities to improve their bodies, minds, and spirits. Fresh air is full of oxygen is provided health to the cells in our bodies. Fresh air can help us feel more energized and even help us sleep better at night .being outside in the fresh air promotes a sense of well being and good mental focus. nature bonds like birds, singing, waterfalls, bubbling brooke resulting trees blowing in the wind all help to bring us into balance the sound found in nature help us to get outside of our heads and appropriate the earth and all it has to offer.

Gardening therapy is the use of horticulture by individuals for self, by leaders of groups, or one-to-one activity for physical, emotional, cognitive and social benefits in recreation, leisure, vocational and social programs. Each of us may realize the therapeutic benefit of gardening when we putter in the garden or care for our houseplants

Mercola (2016) stated gardening is one of life's simple Pressure. Even if you don't have a green thumb, digging in the dirt, planting and nurturing plant life fills a void in many people's lives some call it spiritual while others describe it as therapeutic or stress relieving. gardening is a stress buster gardening is a way of making meaning out of our lives gardening strengthen your immune system.

Need for the Study:

Stress is caused by being ‘here’ but wanting to be ‘there’

Eckhart tolle

Stress is a state of mental or emotional strain or tension resulting from adverse or demanding circumstance. According to WHO currently an estimated 350 million people globally affected with stress. The survey results show that adults continue to report high levels of stress and many reports that their stress has increased over the past year. Global stress survey says that 75% of adults reported experiencing moderate to high levels of stress in the past month and nearly half reported that their stress has increased in the past year. Stress is a major problem for college students throughout the United States stress leads to many issues with emotional and physical health and can be brought on by a number of causes. One of the most frightening consequences of college student stress is suicide resulting from depression.

Young adulthood is a stressful time, full of changes and challenges. Experiencing stress is a normal part of life and with the correct tools doesn't have to negatively impact your life. the psychological health complaints and symptoms, mental health issues are increasing in severity and number on college campuses because, up to 60% of university students left university without finishing their studies because of stress, depression, anxiety and maladjustment. a review of psychological distress among medical students found a high prevalence of depression and anxiety, with levels of psychological distress consistently higher than in the general population and age-matched peers by the later years of training.

Sharma, Amandeep Kaur(2015) survey reports that to identify the factors contributing to stress among nursing students. A total of thirty seven subjects participated in the study. In which 97% of the subjects had moderate level of stress whereas 3% had severe stress. The environmental factors had maximum contribution (40%) followed by the interpersonal factors (30%). The findings summaries that environmental factors play a major role in imparting stress among students.

According to national college health assessment (2013) stated that where the average age of survey was 21 years reported that almost half (46.3) of all undergraduate students surveyed felt trauma or overwhelmed in regard to their academic responsibilities and half of the students are reported that moderate and severe stress.

National stress in America survey (2013) reported that survey involved more than 2000 US adults age 18 .among the adults 69% of high stress. Common source of the stress involved money with 69% of participants citing financial problems and conflicts as the primary cause of their anxiety

According to American psychological association (2015) was conducted survey and reported that responsibilities are the most common stressor (54%) followed by personal health content(51%) health problems affecting the family (50%) and the economy (50%) over time younger and women consistently have struggled with stress.

Shalini agarwal (2010) study says the gender differences in stress among young adult. The major finding of the study was 31.6 % male respondent 28.4% female respondent suffering from mild stress. In moderate stress 65% of male and 68% of female were having moderate stress 3.4% for both male and female having the severe stress. More females were suffering from moderate stress as compared to male eg 20-25 years 31.6% male and 43.4% female are having stress.

Keith Hampton(2015) observed the development of internet technologies also influence the stress. Stress might come from maintaining a large network of face book friends, feeling jealous of their well documented replying to text messages photos of fantasy crafts. Participants responded for the 4 point scale. The result of survey report that the average American adult scored 10-20 of 30 on the PSS. On average women report experiencing than men. The average women score 10.5 man score 9.8 on average men reported stress level that were 7% lower than for women.

American institute of stress (2008) survey reported the eight in 10 students say they have sometimes or frequently experienced stress in their daily lives over the past three months 60% of students are having severe stress it interfered with their ability to complete their school work.

Lawrence robinson (2017) stated that stress management on the other hand, helps you break the hold stress has life so can be happier, healthier, and more productive. Management starts with identifying the sources of stress based on the therapeutic treatments are achieved.

Benenden says that Stress management are interventions designed to reduce the impact of stress. These can have an individual focus, aimed at increasing an individual's ability to cope with stress. The two main pillars of stress management are control and prevention. A complementary approach is one among the management to easing feelings of tension and stress. The frenetic pace of modern-day life seems designed to foster tension. Whether it's the daily commute, pressure in the workplace or even family frictions, many of us are feeling increasingly stressed out. In terms of easing the symptoms of stress, you could try going for a run (to clear the mind, and release those feel good endorphins) or you may want to explore a more alternative approach. Some useful complementary therapies we use today are

- Aromatherapy,
- Massage,
- Mindfulness,
- Relaxation technique
- **Gardening therapy**
- Reflexology
- Reiki
- The Infrared Stress Release Booth .
- Meditation classes

Gardening is one of life's simple pleasures. Its helps to relieve stress and attention fatigue. Gardeners are more likely than non gardeners to report being happy and satisfied with their lives. A study published the journal of health psychology reported among 30 people first they perform a stress full task, then were assigned to either 30 minutes of outdoor gardening. Levels of stress hormone cortisol were

measured and the self reported their mood. Gardening led to decrease in cortisol, the decreases were more significant in the gardening group.

It is clear that there is an urgent need to understand the risk for stress and preventive measures, therapies also provided for the respondent to relieve from stress

From the mentioned studies and the personal experience investigator found that there is a need to strengthen the people and relieving from stress the present study is designed for effect of gardening therapy on reducing the level of stress

Statement of the Problem:

A quasi experimental study to assess the effect of gardening therapy on reducing the level of stress among B.Sc (N) I Year students in RASS Academy college of nursing at Poovanthi

Objectives of the Study:

- To assess the level of stress before the gardening therapy among B.Sc (N) I Year students in RASS Academy college of nursing at Poovanthi
- To evaluate the effect of gardening therapy on reducing the level of stress among B.Sc (N) I Year students in RASS Academy college of nursing at Poovanthi
- To determine the association between the pre level of stress and their selected demographic variables among B.Sc (N) I Year students in RASS Academy college of nursing at Poovanthi.

Hypothesis:

- H₁: There is a significant difference between pre and post level of stress of BSc (N) I Year students in RASS Academy College of nursing at poovanthi
- H₂: There is a significant association between the pre level of stress with their selected demographic variables of B.Sc (N) I Year students in RASS Academy College of nursing at Poovanthi.

Operational Definition:**Effect:**

Effect is the capability of producing a desired result or the ability to produce desired output. When something is deemed effective it means it has an intended or expected outcome, or produces a deep, vivid impression

Gardening therapy:

It is defined as the engagement of a person in gardening and plant based activities facilitated to achieve specific therapeutic treatment. The steps of gardening therapy are preparing the soil, plowing, sowing, residents watering, choosing various vegetables, weeding, and reaping the harvest/vegetables.

Stress:

Stress is an adaptive response to a perceived danger or threat that involves physiological cognitive, affective, and behavioral components.

B.Sc (N) I Year students:

Bachelor of nursing is an academic degree in the science and principles of nursing granted by accredited tertiary education provider. In this study, the students studying 1st Bachelor of science in nursing with moderate and severe stress

Assumptions:

The study assumes that

- Gardening therapy is a non pharmacological treatment and it is simple and effective measure to reduce stress.
- It will create the positive attitude, hope and confidence in life endangering stressful situation.
- Gardening therapy is a type of relaxation and divertional therapy which reduces the stress and channelizes the mind away from worries.

Delimitation:

- Students are not available at the time of gardening therapy
- The study was limited to data collection period of 30 days

Projected outcome

This study will reveal the importance of gardening therapy and it will reduce the stress among B.Sc (N) I Year students.

Conceptual frame work:

The present study aims at assess the effect of gardening therapy on reducing the level of stress among B.Sc (N) I Year students in RASS Academy college of nursing. The frame work of the present study based on shuffle beam's CIPP model, 1960.

The model was developed by Daniel shuffle beam in 1960 who was professor at western Michigan University. CIPP is an acronym that stands for context, input, process, and product

Context:

It provides information for the development and evaluation of mission, vision, values, goals, and objectives and priorities

In this study context consist of the demographic data of the information regarding students and their parents it includes age in years, gender, religion, health status, type of family, family status and monthly income of their family and any social problems in their family.

Input:

- It helps to know about gardening therapy.
- Gardening therapy on reducing the level of stress activities includes preparing the soil, plowing, residents, water, weeding & reaping vegetables.

Process

Process includes the implementation of activities of gardening therapy, this would help in identifying the defects in the implementation plan.

Product:

It is the evaluation of the outcome of the program to decide to accept, end or to terminate the program and there by deciding whether a change is needed in the input

In this study product is to reduce the stress of the students followed by the implementation of the gardening therapy.

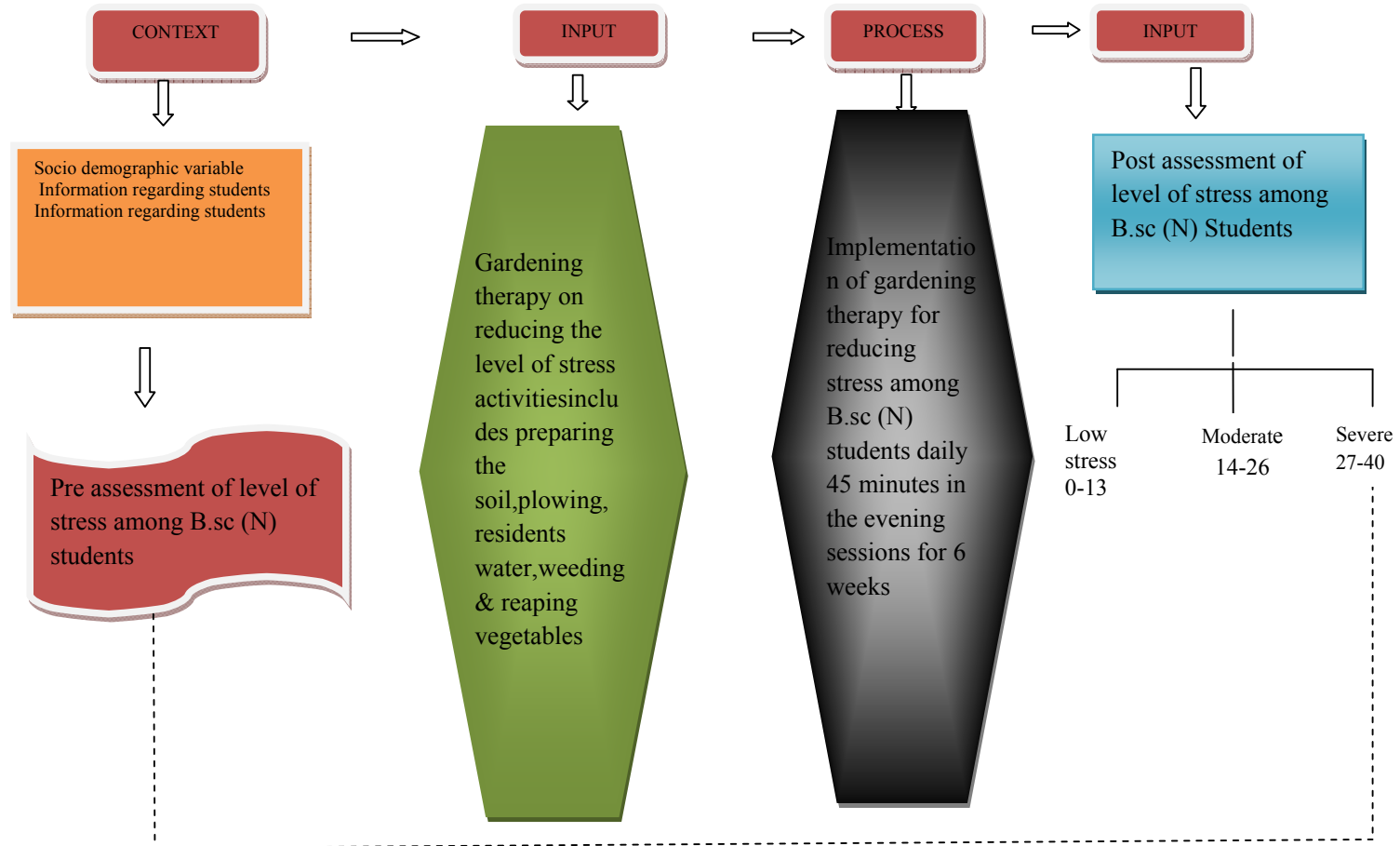


Figure :1 Conceptual frame work based on shuffle beam's CIPP model (1960)

CHAPTER II

REVIEW OF LITERATURE

The extensive review was made to strength the present study in order to lay down the foundation, which helps to reveal the prevailing the situation of the similar studies in different areas. Existing studies and information are often indispensable in helping the investigator to focus on a particular problem and to formulate suitable research process.

The available literature and studies are organized under the following headings

- Literature related to stress
- Literature related to other complementary therapy for reducing stress
- Literature related to gardening therapy to reduce stress.

Literature related to stress.

Nethra .S,et al (2017) has cross sectional study to assess the level of stress and coping strategies prevailing among 148 1st year medical undergraduate students in Tamil Nadu. A self administered pretested questionnaire was used to collect demographic information and perceived stress scale & brief COPE to assess the stress and strategies. The result shows that about 80% of the boys and 75% of the girls reported a moderate or higher stress level .Most common coping mechanism employed among female students under stress was religion and among boys, the most common mechanism was humor. The study concludes that stress was higher in college students.

Agarwal.S, Srivastava.N (2013) has done a study to assess gender difference in stress among 120 young adults in a school of home science in lucnow university. The samples were selected through purposive sampling technique and data was collected using self administered interview along with the perceived stress scale. Out of 120,60 were female and 60 were male. On the whole 31.6% of the male respondent and 28.4% of female respondent had mild stress ,more than half of them had moderate stress and a few around 3.4 % had severe stress. The Results shows that

stress was higher among female student and there was highly significant difference between gender and stress.

Vivek B waghachavare et al, (2012) had conducted a cross sectional study to assess stress among 1200 students of professional colleges from an urban area of Sangali district in Maharashtra. The samples were selected through convenience sampling techniques and the data were collected through self administrated questionnaires and depression ,anxiety and stress scale . The results shows that out of 1200 students 299(24.4%) experienced stress, in which 123 participants had mild stress,93 had moderate stress and 83 had severe stress .Concerning gender ,stress was present in187 (27.7%) female students compared to 112 (20.4%)male respondent. The study findings reveals that academic ,environmental, social and health problems all play important role in the development of stress.

Indira .A,et al has done a study to assess the level of stress among 60 Bsc nursing 1st year students in Narayana college of nursing ,Nellore. The samples were selected through simple random sampling technique and modified student stress scale was used to assess the stress level. A descriptive research design was adopted for the study. Out of 60 students ,15(25%) had mild stress,22(36.7%) had moderate stress and 23(38.3%) had severe stress. There was significant association with demographic variables such as parents education, family income ,type of family and awareness about the nursing profession. The study shows that the nursing students had stress.

Literature related to complementary therapy for reducing stress

Salomi.Js,(2016) had conducted a quasi experimental study to assess the effectiveness of yoga therapy on the level of stress among institutionalized elderly in selected oldage homes at Chennai. The 60 samples were selected through stratified random sampling techniques. The data were collected based on demographic & geriatric stress assessment scale. The result shows that 52% had mild stress 23% of people had a moderate stress and 10% of people had severe stress. In post test 68% of a people had a mild level of stress, 20% of people had a normal level, 12% of people had a moderate level stress. the study revealed that the yoga therapy was effective in reducing the level of stress among oldage was highly significant reduction of stress with the statistical value of 0.001 level.

Anuradha, Shalini A (2015) had conducted a quasi experimental study to assess the effectiveness of body mind exercise upon stress among 60 special teacher. The sample selected through purposive sampling techniques and The data collected from the teachers through standardized tools which were self administrated questionnaires method. The mind body exercise was conducted for about 30 minutes every day for 5 days per week for 5 weeks and the level of satisfaction assessed by the rating scale. The result shows The result shows that in the pre intervention stage, the mean score 29.3 where as in post intervention there was a significant mean stress reduction of 10.6. This indicates that Mind body exercise was effective in reducing stress among elderly depressive clients.

Palak patel (2014) conducted a study to assess the effectiveness of progressive muscle relaxation therapy on stress among staff nurse working in selected hospitals at vadodara city. The 30 samples were selected through convenient sampling technique and the data was collected using self administered questionnaire & stress assessment rating scale. Pre experimental one group pre test and post test design was adopted for the study. The self practice of progressive muscle relaxation therapy was applied on each sample, one daily for 15 days was the intervention used to relieve stress. The result reveals that in pretest, most of the nurses 53.3% had moderate stress, 40% had mild stress and 6.7% had severe stress, where as in post test, most of the nurses 73.3% had mild stress and 26.7% had no stress. They conclude progressive muscle relaxation therapy was effective in lowering the stress of staff nurse.

Revathi C (2014) had conducted a quasi experimental study to assess the effectiveness of positive behavior therapy upon stress among 60 elderly depressive clients in the selected old age home in Chennai. The samples were selected through purposive sampling techniques and data was collected using geriatric depression scale and perceived stress scale. The samples are participated in 60 minutes of positive behavior therapy. The result shows that in the pre intervention stage, the subjects had mild stress with a mean of 40% where as in post intervention there was a significant mean stress reduction of 27. The study concluded that in pre intervention 46.7% of the subjects had moderate stress where as in in post intervention all the subjects had only mild stress. This indicates that positive behavior therapy was effective in reducing stress among elderly depressive clients.

Kamal (2012) has analyzed the effectiveness of Pranayama on stress reduction among 60 software employees in selected settings at Bangalore. The participants were selected through purposive sampling technique. A stress rating scale was used to collect the data from the subjects. Pranayama was employed to reduce stress among the software professionals. The result shows that in the pre intervention stage, the subjects had mild stress with a mean of 50.6% where as in post intervention there was a significant mean stress reduction of 31.0%. The study concluded that in pre intervention 46.7% of the subjects had moderate stress where as in in post intervention all the subjects had only mild stress. This indicates that pranayama was effective in reducing stress among software professionals.

.Literature related to gardening therapy to reduce stress:

Akshara P.V , Kumar .L. M, (2014) has done a quasi experimental study to assess the effect of horticulture therapy on level of stress among 60 institutionalized children between the age of 10-15 years in Trivandrum District (Kerala). The Samples were selected through Purposive sampling technique and were assigned into two groups, 30 in experimental and 30 in control group. The study was conducted using equivalent pre test post test control group design. The researcher assessed the level of stress with the help of a self structured stress questionnaire and through interview method. The children with mild, moderate and severe level of stress was allotted for both experimental group and control group. Intervention was given for 45 minutes daily for a period of 3 weeks. For the experimental group, mean pre test score of 30 samples was 75.7 and mean post test score is 64.9. For the control group, mean pre test score of 30 samples was 76.6 and mean post test score was 76.7. The „t□ calculated value was 0.32 in pre test and 4.74 in post test. Results show that having access to a garden has a significant positive impact on stress. There is significant differences in level of stress before and after horticulture therapy. They concluded that horticulture therapy was cheaper and effortless therapy for reducing stress among institutionalized children.

Ji yong lee(2016) was conducted the experimental study to assess the effect horticultural therapy program among 60 soldiers based on the self expression model for improving adjustment to military life in air force, gyeonggi province, south korea.

The random sampling technique was used to select the sample 30 experimental 30 control group. The results show that experimental group had significant effect of gardening therapy and control group had no significant effect. In conclusion gardening therapy it will improve the self esteem, and the reduction of stress.

Soo seon jung (2017) was conducted study to assess the effect of horticultural therapy program based on health care education for stress reduction of hypertensive patients among 60 adult hyper tension patients of age between 30-64 years.the random sampling techniques for 30 experimental and 30 control group and data collection was done. As results shows horticultural therapy program effect of the sample to reduce stress. The findings shows the horticultural therapy made the significant positive effects on stress.

CHAPTER III

RESEARCH METHODOLOGY

This chapter deals with the research methodology adopted to assess the effect of gardening therapy on reducing level of stress among B.Sc (N) I Year students in RASS Academy College of nursing at Poovanthi. It includes the research approach, research design, the setting of the study, study population, sample size, sampling techniques and criteria for data sample selection. It further deals with the development of tool, procedure for data collection and plan for data analysis.

Research approach:

An evaluatory approach was adopted by the investigator to find the effect of gardening therapy on reducing level of stress among B Sc(N) I Year students in RASS Academy college of nursing at poovanthi.

Research design:

The investigator had adopted pre experimental one group pre test post test design for this study. The diagrammatic representation of design is presented below

Group	Pretest	Experiment	Post test
E	O ₁	X	O ₂

E-Experimental group

O₁- Assessment of the level of stress before gardening therapy

O₂- Assessment of the level of stress after gardening therapy

X- Gardening therapy

Variables of the study:

In this study gardening therapy was the independent variable and the level stress of the samples was the dependent variable.

Setting of the study

The study was conducted in RASS Academy college of nursing, at Poovanthi sivagangai.

Study population:

The study population comprised of Bsc (N) I Year students studying in RASS Academy college of nursing at poovanthi.

Sample:

The Students with moderate and severe stress who fulfill the inclusion criteria were selected as sample for the study from RASS academy college of nursing at Poovanthi.

Sample size:

The sample size comprised of 50 B.Sc (N) I Year students.

Sampling techniques:

The investigator adopted non probability Purposive sampling technique to select the subjects with moderate to severe stress.

Criteria for sample selection

The samples were selected based on the following inclusion and exclusion criteria.

Inclusion criteria

- Female students with age group of 18-22 years who are having moderate to severe level of stress as assessed by perceived stress scale.
- Students who are not having gardening therapy as their hobby.

Exclusion criteria:

- Students who have skin allergy
- Students who all are not willing participate in the study
- Students who are not available at the time of data collection

Description of the tool:

The tool consists of

SECTION-A

Demographic profile of the samples:

Part I: Demographic profile of the sample consists of information related to students such as age ,religion, type of family ,place of residence, medium of language , about their friends, health issues and reason for choosing the course .

Part II: Information related to students parents such as father and mother education ,occupation ,family income, health issues and social problems in family.

SECTION-B Perceived Stress scale.

Perceived stress scale (PSS) was originally developed Sheldon cohen in 1983, helps in understanding how different situations affect our feelings and our perceived stress.

Figuring your PSS score:

You can determine your PSS score by following these direction

- Scoring pattern of each question is given below.

Scoring	Never	Almost Never	Sometimes	Fairly often	Very often
Question 1,2,3,6,9&10	0	1	2	3	4
Question 4,5,7&8	4	3	2	1	0

- Add up your score for each item to get a total. Individual score on the PSS can range from 0-40 with higher scores indicating higher perceived stress.

Interpretation of PSS score:

- ❖ Score ranging from 0-13 would be considered low stress.
- ❖ Score ranging from 14-26 would be considered moderate stress
- ❖ Score ranging from 27-40 would be considered high perceived stress

Testing of the tool:**Validity of the tool:**

The tool was developed by Cohen based on the review of literature.

Reliability of the tool:

The reliability value of the tool 0.85 and hence the questionnaire was found to be feasible.

Pilot study:

In order to test the feasibility, relevance and practicability of the study, a pilot study was conducted among 6 students who are studying in Immaculate school of nursing, Sivagangai. The data were analyzed to find out the reliability.

Data Collection Procedure:

The researcher obtained formal permission from the college principal and the dissertation committee of RASS Academy College of nursing. Pre experimental one group pre test post test design was used for the study. A total of 50 B.Sc I Year nursing students were selected through purposive sampling technique. Appropriate orientation had been given to the samples about the aim of the study, nature of questionnaire and adequate care was taken for confidentiality and identity. The demographic variables collected from samples include the basic information regarding students and their parents. The assessment of stress was done with the perceived stress scale before initiating the gardening therapy. The gardening therapy was given daily in the evening time for about 45 minutes for a period of 30 days. The gardening therapy activities are preparing the soil, plowing, sowing, residents watering, choosing various vegetables, weeding, and reaping the harvest/vegetables. At the end of 4th week, the post assessment of the stress was carried out using the same tool as same as pre test. Collected data tabulated and analyzed.

Plan for the data analysis

The data analysis was done according to the objectives of the study both the descriptive and inferential statistics were used.

Descriptive statistics

Frequency, percentage and mean were used to describe the level of knowledge.

Inferential statistics

Paired t-test was used to determine the difference between the pre test and post test values in terms of effectiveness of gardening therapy, chi square test was used to determine the association between the pre test level of stress for selected demographic variables.

Protection of human rights

Research proposal was approved by dissertation committee, RASS Academy College of nursing, poovanthi. Prior to the study the oral consent of each sample was obtained before starting the data collection .assurance was given to the samples that confidentiality would be maintained.

CHAPTER IV

ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the analysis and interpretation of the data collected from college students who have received the gardening therapy. The collected data were analyzed, tabulated, and presented under the following sections:

Section I

Description of the samples according to their demographic variables

Section II

Description of the samples according to their level of stress before and after gardening therapy.

Section III

Comparison of mean pre and post level of stress.

Section IV

Association of pre level of stress with their selected demographic variables of the samples.

Section I - Description of the samples according to their demographic variables

Table 3: Frequency and Percentage Distribution of samples according to their demographic variables

(N=50)

S.no	Demographic variable	Frequency	Percentage (%)
1	Age in years a) 18-19 b) 20-21 c) 22-23	35 15 0	70% 30% 0%
2	Religion a) Hindu b) Christian c) Muslim	46 4 0	92% 8% 0%
3	Type of family a) Nuclear family b) Joint family c) Extended family	44 6 0	88% 12% 0%
4	Place of residence a) Hostel b) Day scholar c) Paying guest d) In relative home	37 12 0 1	74% 24% 0% 2%
5	Medium of language a) Tamil b) English	46 4	92% 8%
6	Are you interested in studying BSc (n) a) Yes b) No	28 22	56% 44%
7	Whether do you have any health problem . a) yes b) no	30 20	60% 44%
8	How many friends do you have a) 0 b) 1 c) 2 d) Above 3	3 0 4 43	6% 0% 8% 86%
9	Do you have any adjustment problem with your friends a) Yes b) No	38 12	76% 24%

10	Do you have any feeling of home sick a) Yes b) No	34 16	68% 32%
11	Father's educational status a) Illiterate b) Primary c) Higher secondary d) Degree e) Post degree	8 12 22 8 0	16% 24% 44% 16% 0%
12	Father's occupational status a) Farmer b) Labour c) Govt job d) Private job	17 16 5 12	34% 32% 10% 24%
13	Mother's educational status f) Illiterate g) Primary h) Higher secondary i) Degree j) Post degree	16 18 11 4 1	32% 36% 22% 8% 2%
14	Mother's occupation a) House wife b) Labour c) Private job d) Govt job	32 10 7 1	64% 20% 14% 2%
14	Monthly income of your family a) less than 5000 b) 5000-10000 c) 100001-15000 d) Above 15000	7 33 5 5	14% 66% 10% 10%
15	Do you have health issues in your family members a)Yes b)No	38 12	76% 24%
16	Whether do you have social problems in your family a) Father alcoholic b) Divorced parents c) Adopted child d) Financial burden e) none	20 0 0 28 2	40% 0% 0% 56% 4%

Table (3) depicts the distribution of samples according to their demographic variables. With regards to age, 35(70%) samples belongs to 18-19 years of age and 15 (30%) belongs to 20-21years of age

Regarding their religion, 46 (92%) were belongs to Hindu and 4 (8%) were belongs to Christian With respond to the type of family, 44 (88%) lives in nuclear family and 6 (12%) lives in joint family.

Regarding the place of residence, 37(74%) were hostel stayers 12(24%) were day scholar and 1(2%) was staying in relative home. With the reference to the medium of language previously studied, 46 (92%) had Tamil as medium language and 4 (8%) had English as medium of language.

Among 50 samples, 28(56%) were interested in studying B.Sc nursing and 22 (44%) were not interested in studying B.Sc(N) Course. Regarding their health problem, 30 (60%) had health problem and 20(40%) had no issues in their health status. Regarding their friends status 3(6%) had no friends,4(8%) had 2 friends, 43(86%) had above 3 friends. In their adjustment status, 38 (76%) had adjustment problem and 12 (24%) doesn't have any adjustment problem. Regarding home sick, 34 (68%) had home sick and 16 (32%) doesn't have home sick.

With respond to the education of father, 8(16%) were illiterate, 12(24%) had primary education,22 (44%) had higher education and 8 (16%) had completed their degree . Regarding their mother education status, 16 (32%) were illiterate,18 (36%) had primary education, 11(22%) had higher secondary, 4 (8%) had completed degree and 1(2%) had completed post degree.

Concerning the occupation of father, 17 (34%) were farmer, 16(32%) were labour, 5(10%) were working in private company and 5(10%) had government job. Regarding mother occupation, 22 (44%) were house wife, 10 (20%) were labour, 7(16%) were private job and 1(2%) were in Govt job.

With the respond of monthly income of the family 7(14%) earns less than Rs5000, 33 (66%) were Rs5000-10000, 5(10%) earns Rs10001-15000 and 5 (10%) earns above 15000. Regarding health issues of the family members 38(76%) have health problem and 12 (24%) earn no health issues.

Regarding their social problems in family, 20(40%) had father with alcoholic habit, 28 (56%) had financial burden and 2 (4%) had no social issues in life.

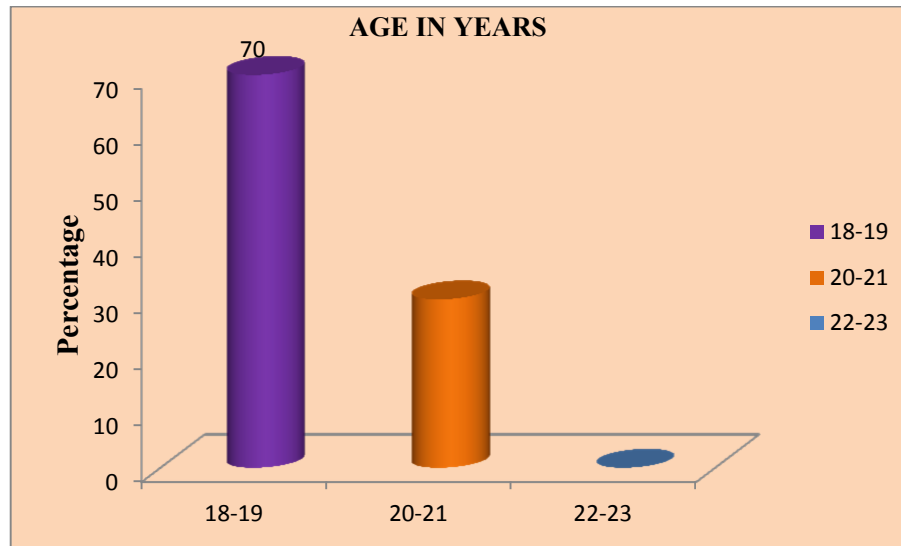


Figure 2: Distribution of samples according to their age

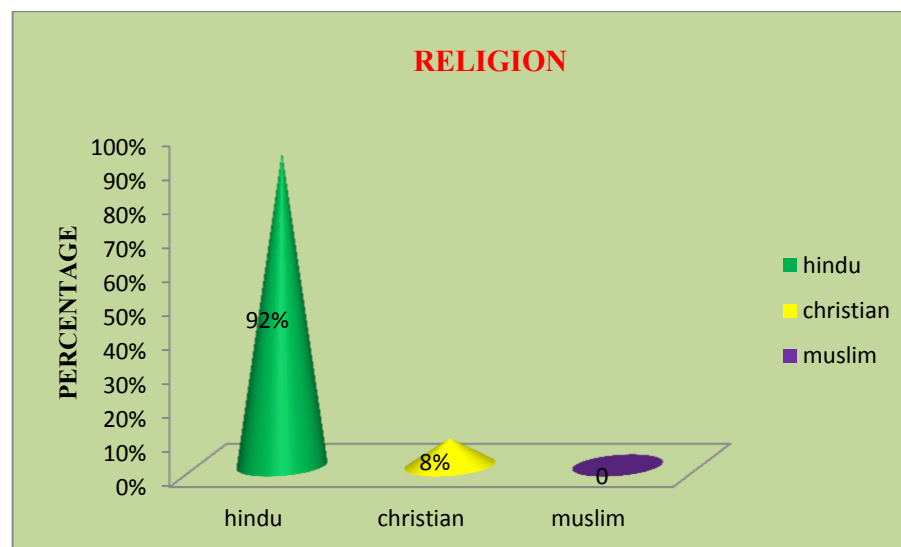


Figure 3: Distribution of samples according to their religion

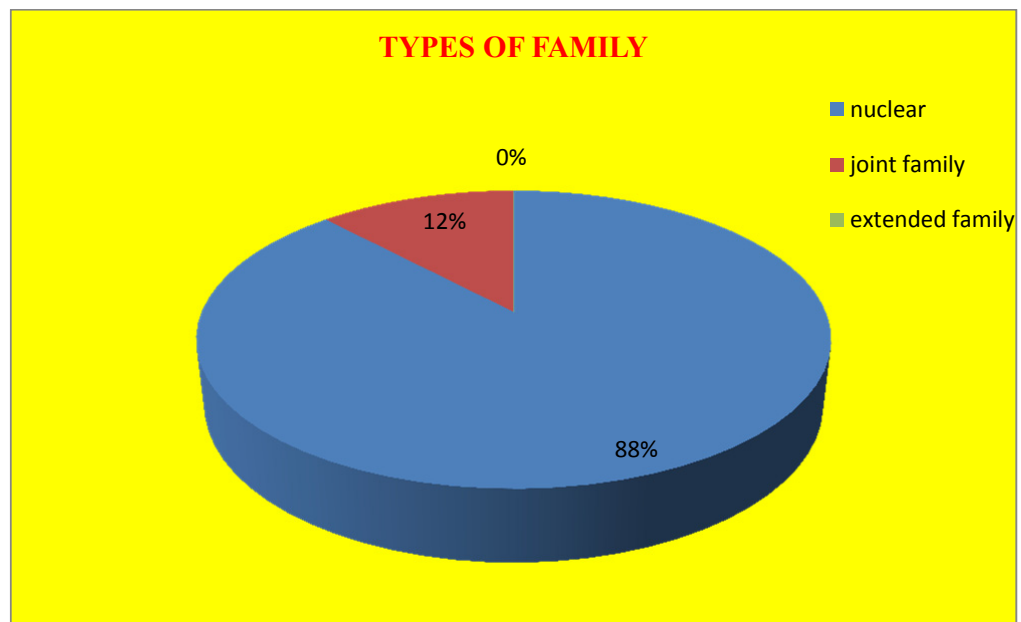


Figure 4: Distribution of samples according to their types of family

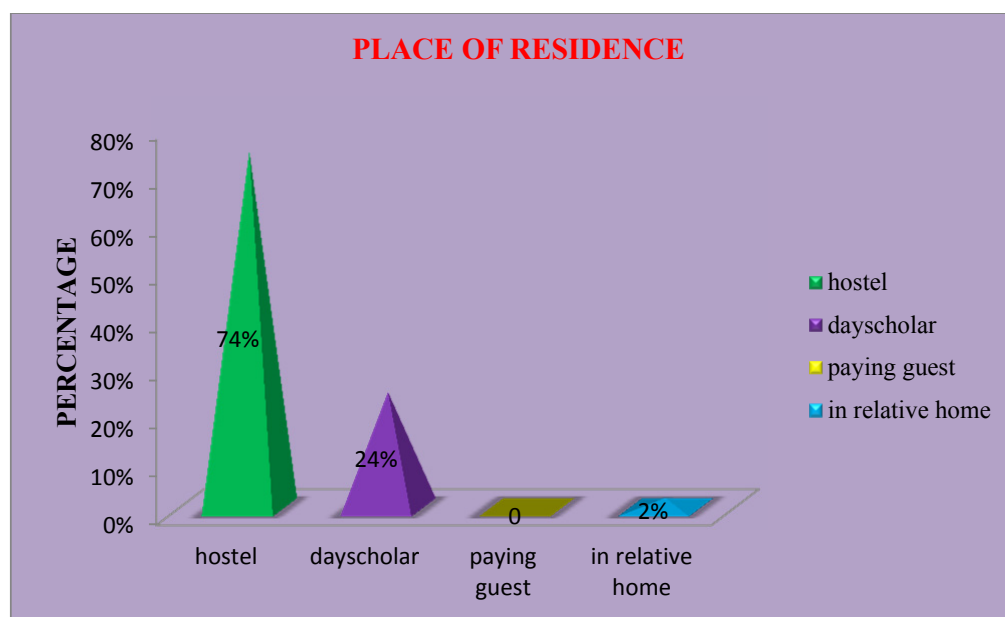


Figure 5: Distribution of samples according to their place of residence

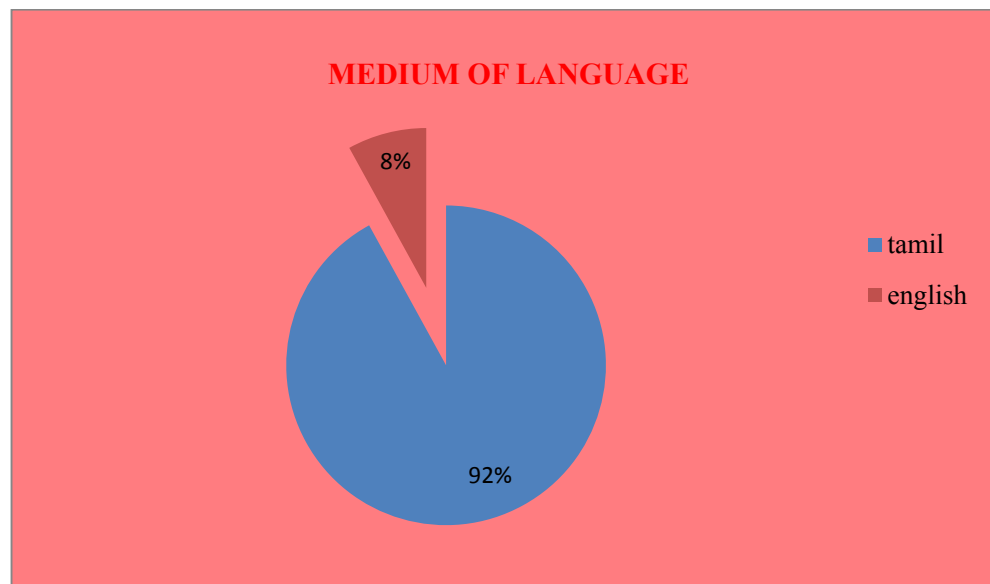


Figure 6: Distribution of samples according to their medium of language

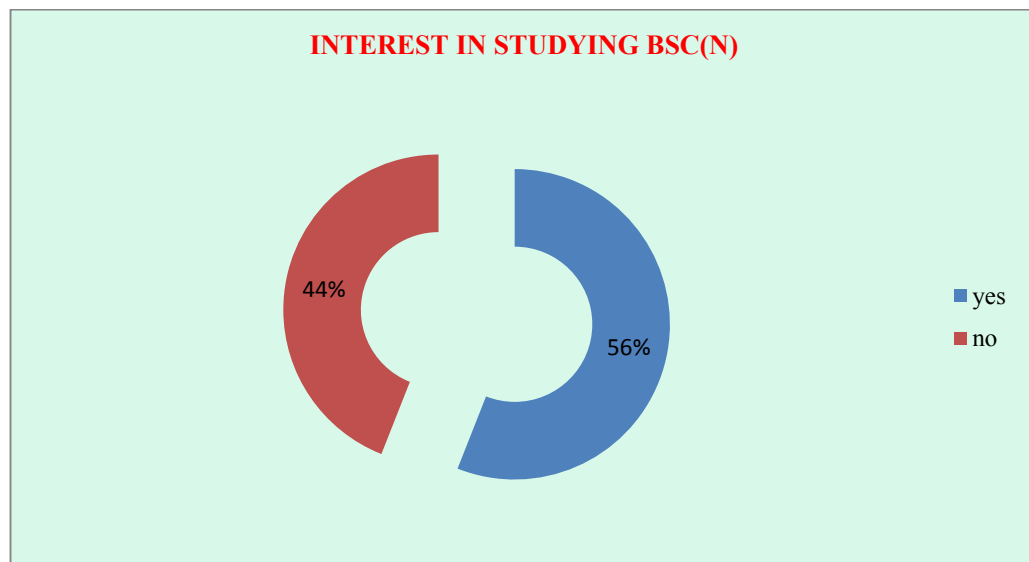


Figure 7: Distribution of samples according to their interest in studying B.Sc (N)

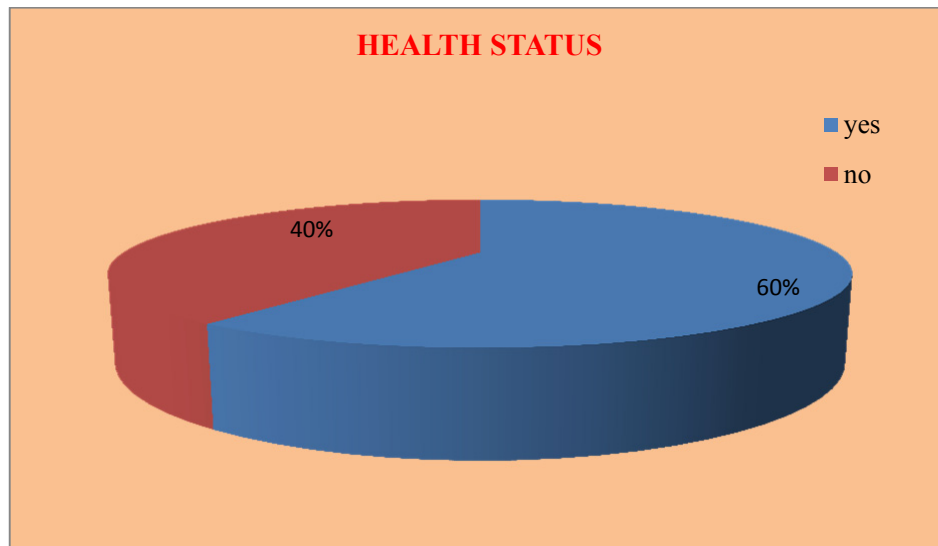


Figure 8: Distribution of samples according to their health problem

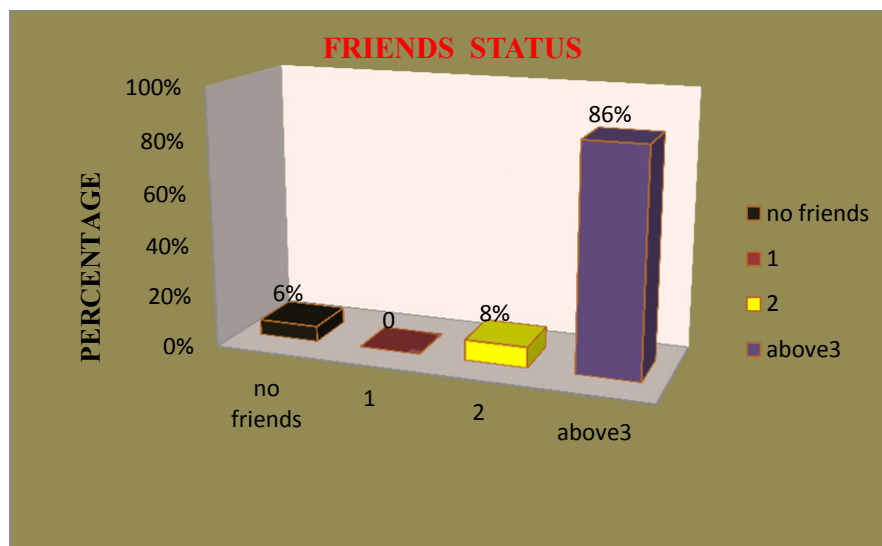


Figure 9: Distribution of samples according to their friends status

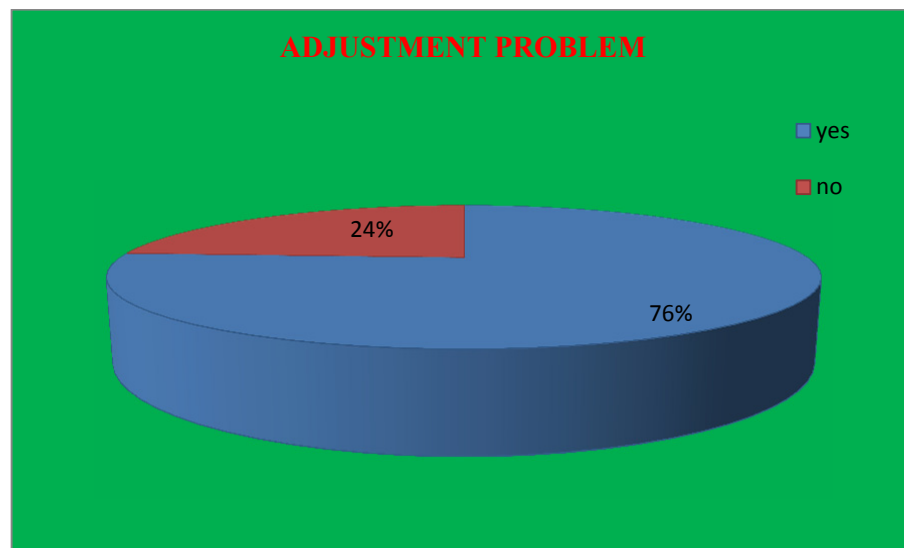


Figure 10: Distribution of samples according to their adjustment problem

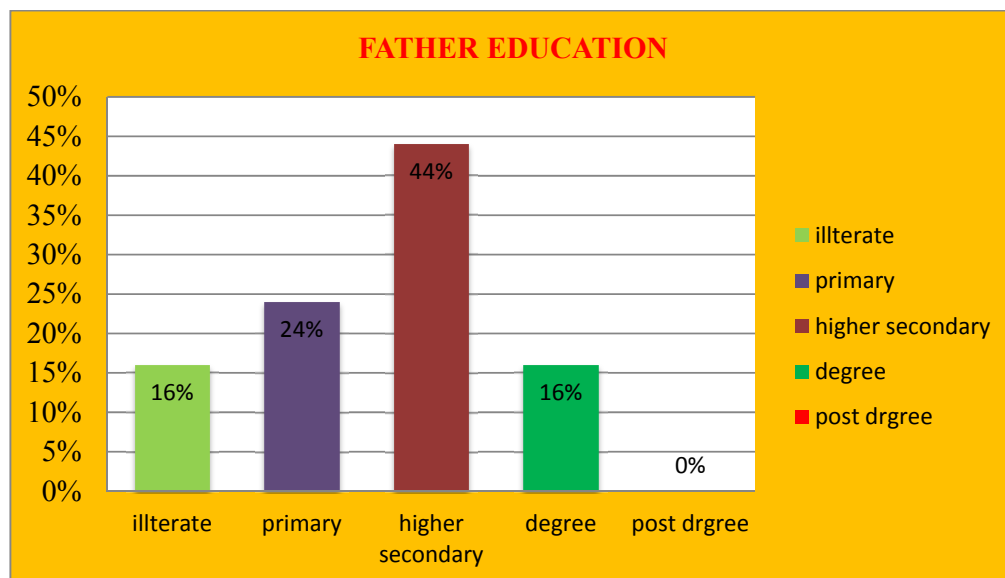


Figure11: Distribution of samples according to their father education

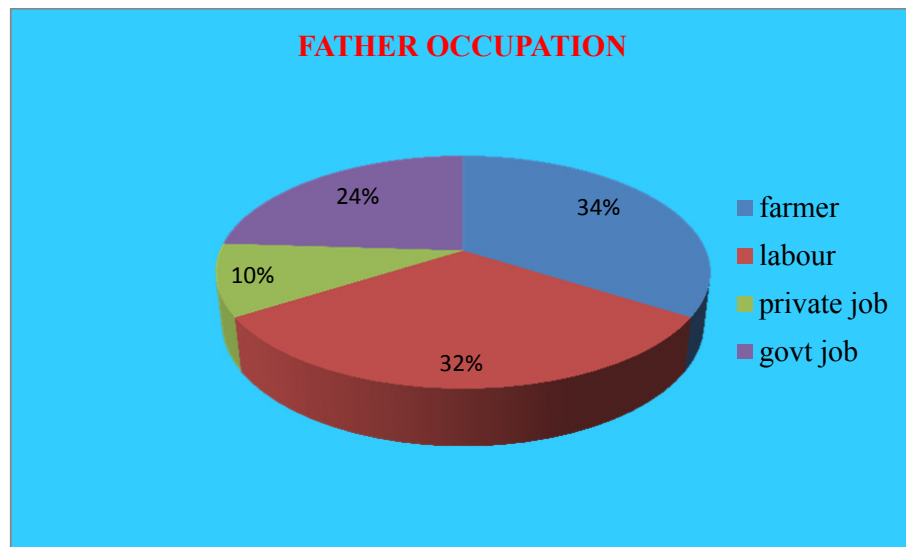


Figure 12: Distribution of samples according to their father occupation

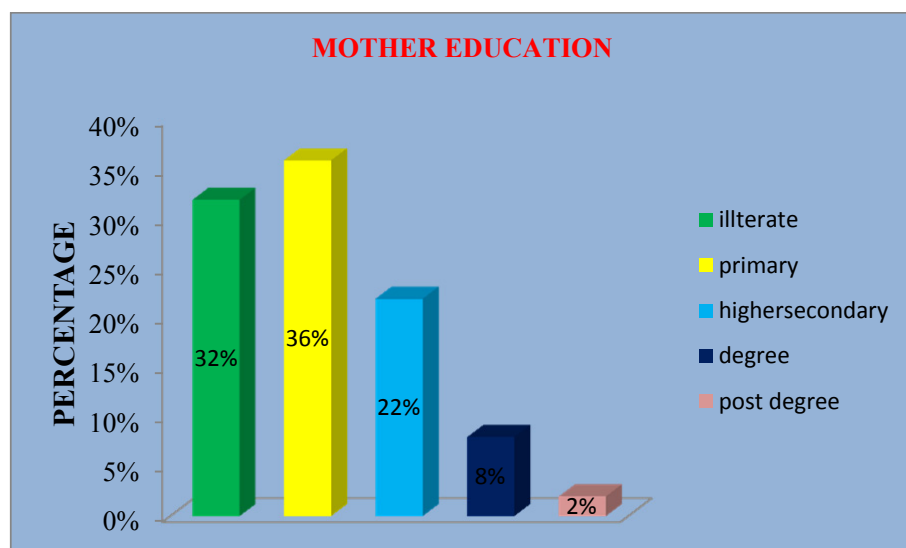


Figure 13: Distribution of samples according to their mother education

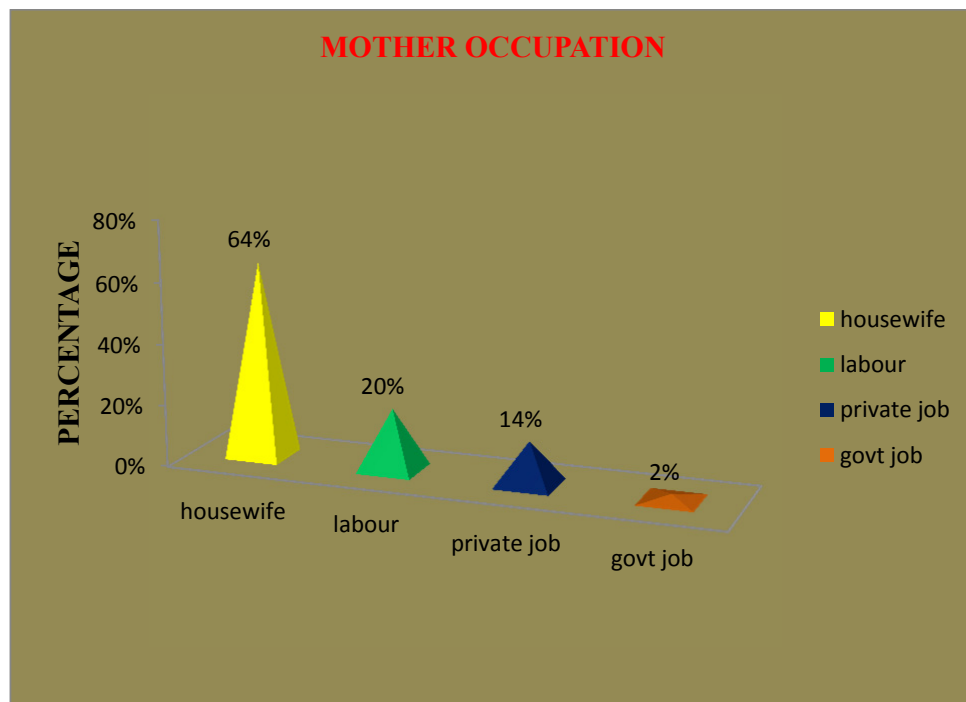


Figure 14: Distribution of samples according to mother occupation

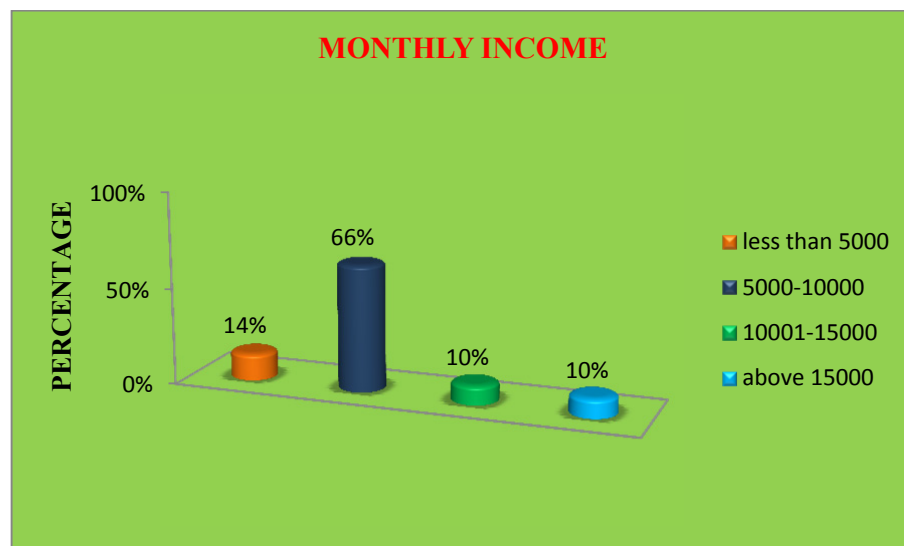


Figure15: Distribution of samples according to their monthly income

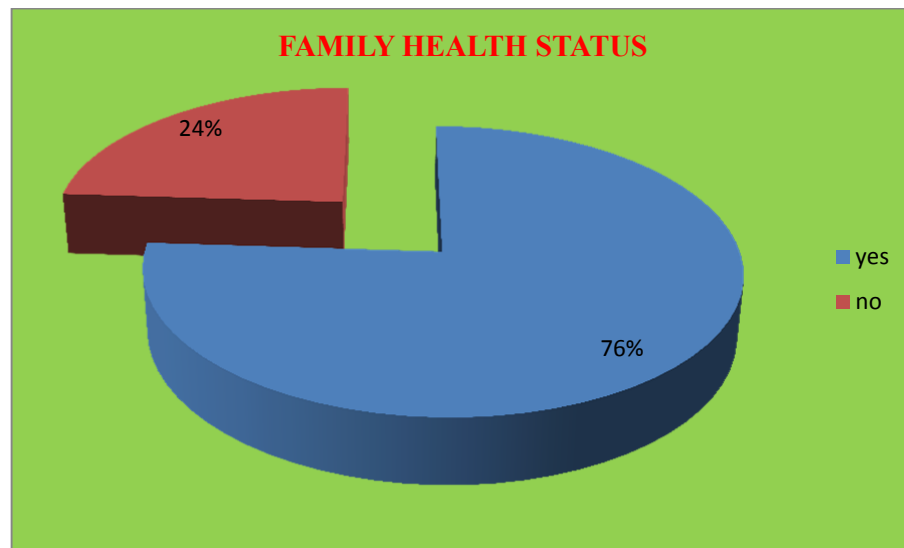


Figure 16: Distribution of samples according to their health status of the family

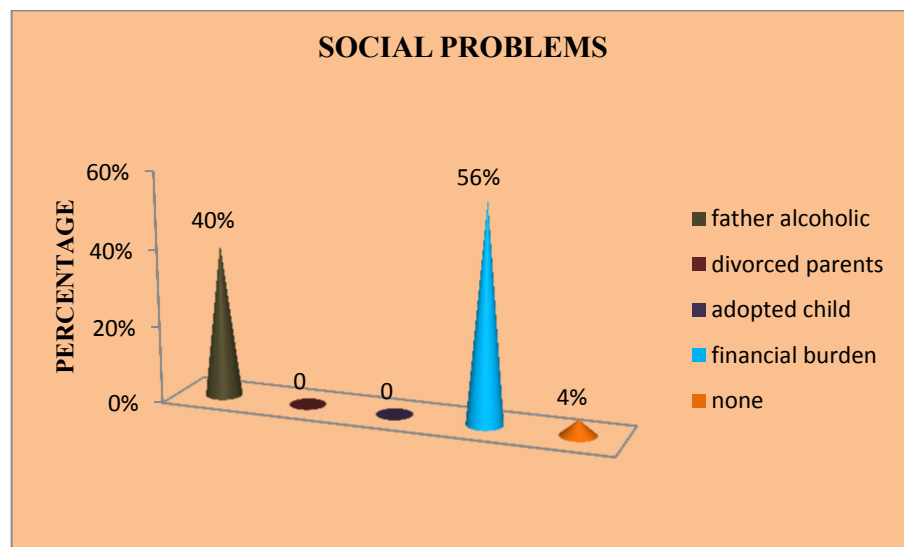


Figure 17: Distribution of samples according to their social problems

Section –II Description of the samples according to their level of stress before and after gardening therapy.

Table 4: Frequency and Percentage distribution of level of stress before and after gardening therapy

(N=50)

Level of stress	Pre test		Post test	
	Frequency(f)	Percentage(%)	Frequency (f)	Percentage(%)
Low stress	0	0	40	80%
Moderate stress	24	48%	10	20%
High perceived stress	26	52%	0	0

Table 4 depicts the frequency and percentage distribution of level of stress before and after gardening therapy .In pre assessment, majority 48 %(24) of samples had moderate level of stress, 52% (26) samples had high perceived level of stress and no body was in low stress.

In post assessment, 40%(19) samples had low stress ,20 %(10) samples had moderate level of stress and no one was in high perceived level of stress. The above findings summarizes that, gardening therapy has significant beneficial effect on reducing the level of stress of the samples.

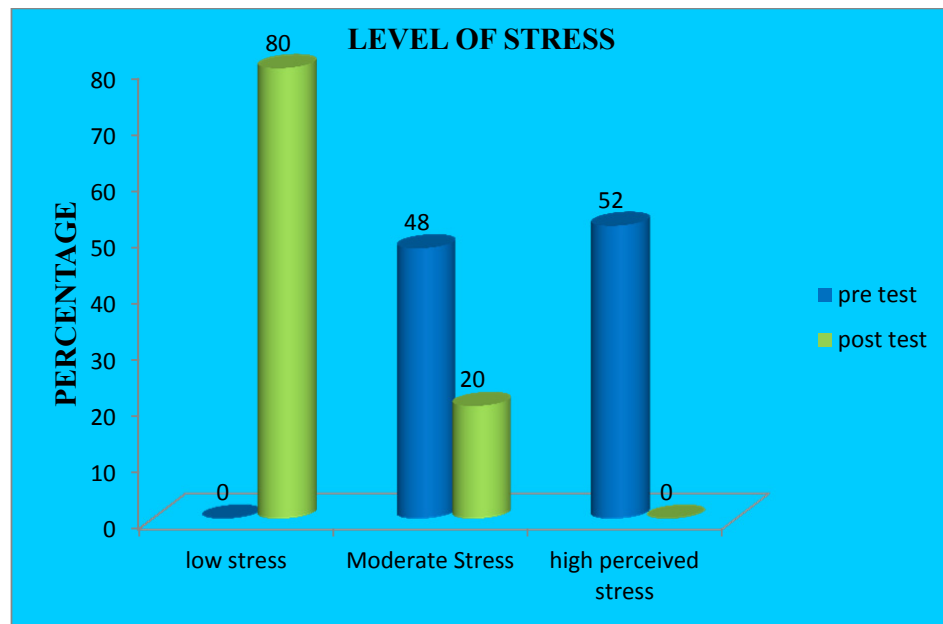


Figure 18 : Distribution of samples according to their level of stress before and after gardening therapy

Section III Comparison of mean pre and post level of stress.

Table 5: Comparison of mean pre and post level of stress of the samples.

S.no	Mean stress score		Mean difference	Standard deviation	T value
1	Pre test	25.8	15.04	4.9	21.25[S]
2	Post test	10.76			

(P=0.05;Table value -2.00)

Table 5 shows the comparison of mean pre and post level of stress of the samples. In pre test, the mean stress score was 25.8, in post test the mean stress score was 10.7. The mean difference was 15.04 and the SD was 4.9 at degree of freedom 49, in 0.05 level of significance t value was 21.25 (table value :2.00). Hence the calculated value was higher than the table value, the hypothesis (H_1) was accepted. The results proven that the gardening therapy was effective in reducing stress among the students who are studying B.Sc (N) I Year students in RASS Academy college of nursing at Poovanthi.

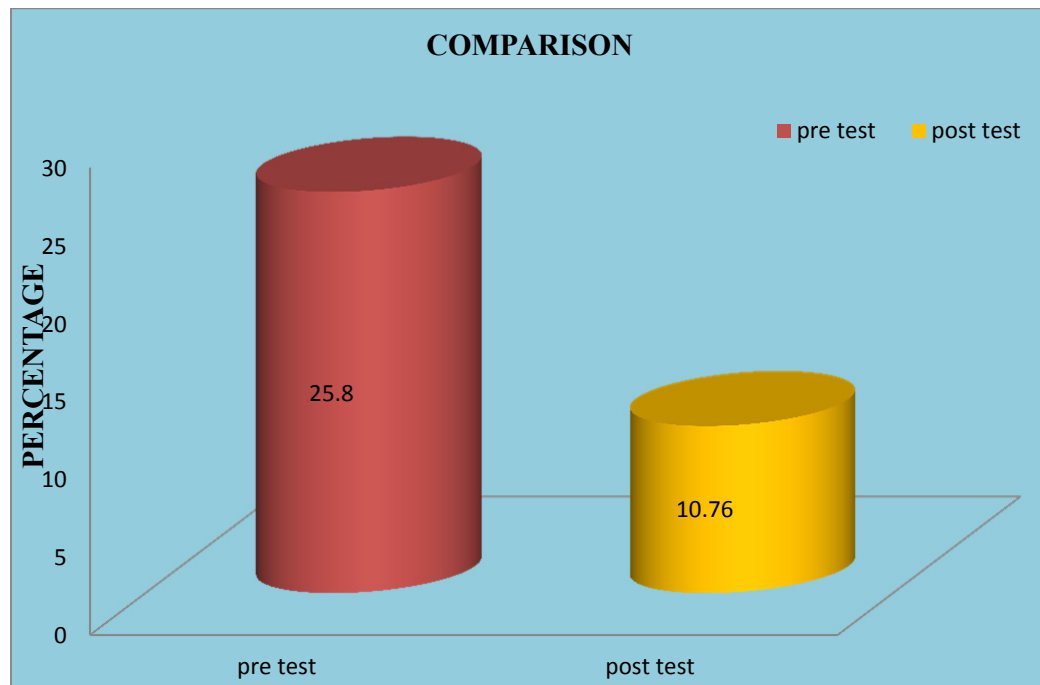


Figure19 : Comparison of mean pre and post level of stress of the samples

Section IV Association of pre level of stress with their selected demographic variables.

Table 6 : Association of pre level of stress with their selected demographic variables

(N=50)

S.no	Demographic variable	Level of stress		Table value	χ^2	Level of significance
		Moderate	Severe			
1	Age in years a)18-19 b)20-21	18 6	17 9	5.991	0.5865	NS
2	Religion a)Hindu b)Christian	20 4	26 0	5.991	4.705	NS
3	Type of family a)Nuclear family b)Joint family c)Extended family	19 5 0	25 1 0	5.991	3.408	NS
4	Place of residence a)Hostel b)Day scholar c)Paying guest d)In relative	17 7 0 0	20 5 0 1	7.815	1.6149	NS
5	Medium of language Previously studied a)Tamil b)English	20 4	26 0	3.841	4.705	S*
6	Are you interest in studying B.Sc (N) a)Yes b)No	18 6	10 16	3.841	6.732	S*

7	Whether do you have any health problem a)yes b)No	20 4	10 16	3.841	10.45	S*
8	How many friends do you have a)0 b)1 c)2 d)Above 3	3 0 1 20	0 0 3 23	7.81	5.207	NS
9	Do you have any adjustment problem with your friends a)Yes b)No	18 6	20 6	3.84	8.224	S*
10	Do you have any feeling of home sick a)Yes b)No	16 8	18 8	3.84	0.187	NS
11	Father educational status a)Illiterate b)Primary c)Higher secondary d)Degree e)Post degree	5 6 9 4 0	3 6 13 4 0	9.49	1.144	NS
12	Father occupational status a)Farmer b)Labour c)Private d)Govt job	11 8 3 2	6 8 2 10	7.815	8.608	S*
13	Mother educational status a)Illiterate b)Primary c)Higher secondary d)Degree e)Post degree	10 8 4 2 0	6 10 7 2 1	9.49	15.75	S*

14.	Mother occupation a) House wife b) Labour c) Private job d) Govt job	15 5 4 0	17 5 3 1	7.81	5.74	NS
15	Monthly income of your family a)less than 5000 b)5000-10000 c)100001-15000 d)Above 15000	4 16 2 2	3 17 3 3	7.81	.4856	NS
16	Do you have any health problems in your family a) Yes b) No	18 6	20 6	3.84	0.025	NS
17.	Whether do you have social problems in your family a)father alcoholic b)divorced parents c)adopted child d)financial burden e)none	10 0 0 12 2	10 0 0 16 0	9.49	2.605	NS

Significant (*) at 0.05 level

In order to find out the association between the pre level of stress and selected demographic variables, chi square test was used. With the reference to the medium of language previously studied the calculated chi square value was 4.705 at df (1) was significant at 0.05 level. Regarding interest in studying B.Sc nursing ,the calculated chi square value was 6.732 at df (1) was significant at 0.05 level. Regarding their health problem the calculated chi square value was 10.45 at df (1) was significant at 0.05 level. In their adjustment status the calculated chi square value was 8.224 at df (1) was significant at 0.05 level. Regarding their mother education status the calculated chi square value was 15.75 at df (4) was significant at 0.05 level. Concerning to occupation of father the calculated chi square value was 8.608 at df (3)

was significant at 0.05 level. Hence there is association with stress level the formulated hypothesis **H₂** was accepted. The other demographic variable such as age ,religion ,type of family ,place of residence ,no of friends ,homesick ,father education, mother occupation, monthly income of family, health issue and social problem of family members shows no association with the pre level of stress.

CHAPTER V

DISCUSSION SUMMARY, CONCLUSION, IMPLICATIONS, LIMITATIONS AND RECOMMENDATION

Discussion:

The present study was designed to assess the effect of gardening therapy in terms of reducing the level of stress among B.Sc (N) I Year students in RASS Academy college of nursing at poovanthi. To find out the effectiveness of gardening therapy, the investigator adopted pre experimental one group Pre test Post test design and 50 students were selected through purposive sampling technique. The investigator assessed stress level by using perceived stress scale.

Demographic variables:

1. With regards to age, 35(70%) samples belongs to 18-19 years of age and (30%) belongs to 20-21years of age.

Melinda j.lckes (2015) conducted the study between differences and undergraduate and graduate students in stress and coping strategies. A total number of 1,139 students randomly selected the age 18 and above. Data were collected and assessed stress questionnaires with five point scale. The results shows students are reported varying degree of stress in last 30 days 21% indicated some stress.37% indicated moderate stress and 42% indicated great deal of stress. The study recommended the need for stress management for the students. The findings shows that support the findings of the present study.

2. Regarding their religion, 46 (92%) were belongs to Hindu and 4 (8%) were belongs to Christian.
3. With respond to the type of family, 44 (88%) lives in nuclear family and 6 (12%) lives in joint family
4. Regarding the place of residence, 37(74%) were hostel stayers 12(24%) were day scholar and 1(2%) was staying in relative home.
5. With the reference to the medium of language previously studied, 46 (92%) had Tamil as medium language and 4 (8%) had English as medium of language.

6. Among 50 samples, 28(56%) were interested in studying B.Sc nursing and 22 (44%) were not interested in studying B.Sc(N) Course.
7. Regarding their health problem, 30 (60%) had health problem and 20(40%) had no issues in their health status.
8. Regarding their friends status 3(6%) had no friends,4(8%) had 2 friends, 43(86%) had above 3 friends.
9. In their adjustment status, 38 (76%) had adjustment problem and 12 (24%) doesn't have any adjustment problem.
10. Regarding home sick, 34 (68%) had home sick and 16 (32%) doesn't have home sick.
11. With respond to the education of father, 8(16%) were illiterate, 12(24%) had primary education,22 (44%) had higher education and 8 (16%) had completed their degree .
12. Regarding their mother education status, 16 (32%) were illiterate,18 (36%) had primary education, 11(22%) had higher secondary, 4 (8%) had completed degree and 1(2%) had completed post degree.
13. Concerning the occupation of father, 17 (34%) were farmer, 16(32%) were labour, 5(10%) were working in private company and 5(10%) had government job.
14. Regarding mother occupation, 22 (44%) were house wife, 10 (20%) were labour, 7(16%) were private job and 1(2%) were in Govt job.
15. With the respond of monthly income of the family 7(14%) earns less than Rs5000, 33 (66%) were Rs5000-10000, 5(10%) earns Rs10001-`15000 and 5 (10%) earns above 15000.
16. Regarding health issues of the family members 38(76%) have health problem and 12 (24%) earn no health issues.
17. Regarding their social problems in family, 20(40%) had father with alcoholic habit, 28 (56%) had financial burden and 2 (4%) had no social issues in life.

The major findings of the study are discussed related to the formulated objectives, as follows.

- **The first objectives was to assess the level of stress before the gardening therapy among B.Sc (N) I year students in RASS Academy college of nursing at Poovanthi.**

The main findings of this study was , majority 48 %(24) of samples had moderate level of stress, 52% (26) samples had high perceived level of stress and no body was in low stress.

Ross (2011) was conducted Cross sectional study to identify stressful events of first-year Nepalese nursing students in the clinical setting and to determine how they cope with the stressful events. A totally 200 students are selected through purposive sampling techniques. Data were collected based on the 10 item scale. It includes academic, environmental, and interpersonal. Age of 46% subjects was in the range of 18-19 years. Another 19% of the subjects were in the age range of 19-20 year, 32% subjects were of more than 20 years of age whereas 3 % of them were less than 18 years of age. All the respondents were female. The study findings illustrates that the 97% of subjects had moderate stress whereas 3% had severe stress. The major factors which were contributing towards stress among students, was the environmental factors contributing around (40%) followed by Intrapersonal factors (30%).

- **The second objectives was to evaluate the effect of gardening therapy on reducing the level of stress among B.Sc (N) I year students in RASS Academy college of nursing at Poovanthi**

The major finding of the study were showed that in pre test, the mean stress score was 25.8, in post test the mean stress score was 10.7. The mean differences was 15.04 and the SD was 4.9 at degree of freedom 49, in 0.05 level of significance t value was 21.25 (table value :2.00). Hence the calculated value was high when compared to the table value. So the hypothesis (H_1) was accepted. The results proven that the gardening therapy was effective in reducing stress among the students who are studying B.Sc (N) .

Shirakawa.T,et al.(2009) has conducted a study to evaluate the psychological effects of gardening therapy in a 498 health volunteers and to identify the factors related to these effects. Surveys were conducted twice in a forest on the same day and twice on a control day. Outcome measures were evaluated using the Multiple Mood Scale-Short Form and the State-Trait Anxiety Inventory A-State Scale. Statistical analyses were conducted using analysis of variance and multiple regression analyses. Stress levels were shown to be related to the magnitude of the gardening therapy effect This study revealed that forest environments are advantageous with respect to acute emotions, especially among those experiencing chronic stress. Accordingly, gardening therapy may be employed as a stress reduction method, and forest environments can be viewed as therapeutic landscapes. Therefore, customary gardening therapy may help to decrease the risk of psychosocial stress-related diseases.

- **The third objectives was to determine the association between the pre level of stress with their selected demographic variables among B.Sc (N) I year students in RASS Academy College of nursing at Poovanthi.**

The major findings of this study were showed that there was a significant association was found between stress score with the selected demographic variables Such as medium of language previously studied, interest in studying B.Sc (N) ,health status of the students, Adjustment problem of the student, father's occupation, Mother occupation. Hence the calculated chi square value was compared with the table value which was higher than the table value. So, the hypothesis (**H₂**) was accepted.The result proven that there was an association between pre test stress score with the selected demographic variables of the samples .

Edward Abasimi (2015) was conducted the cross sectional study to assess the Experience of Stress among 273 Nursing Students in Nursing Training Colleges in Tamale, Ghana. The sample selected through stratified random sampling technique was used and. Data collection collected by using self constructed survey questionnaire based on the Student Stress Survey This finding was rather surprising since it was expected that students would report more academic stressors. The Study found that only 7% of students who attempted suicide cited academic problems as a factor while

75% of them cited personal and social problems as key factors [20]. The findings of the present study thus indicate to us how important personal problems or stressors are and the need to focus counseling on them.

Summary of the study:

The study was conducted to evaluate the effectiveness of gardening therapy in terms of reducing stress among BSc (N) Iyear students in RASS Academy College of nursing at Poovanthi.

The study tested and proved the hypothesis H_1 and H_2 that there was a significant difference in the pre and post level of stress of students. Gardening therapy was proven to be effective in reducing the level of stress.

The conceptual frame work used for this study was based on shuffle beam's CIPP theory. One group pre test post test design (0_1X0_2) was adopted for the present study. The samples consisted of 50 students. Purposive sampling technique was used for selection of samples. Pilot study was conducted on six students in Immaculate school of nursing at sivagangai. No further changes were made in the tool after pilot study. The main study was conducted at RASS Academy college of nursing at Poovanthi. The Data were analyzed by using descriptive and inferential statistics. The hypothesis has been tested at 0.05 levels of significance.

Major finding of the study:

- Regarding their religion, 46 (92%) were belongs to Hindu and 4 (8%) were belongs to Christian With respond to the type of family, 44 (88%) lives in nuclear family and 6 (12%) lives in joint family
- Regarding the place of resistance, 37(74%) were hostel stayers 12(24%) were day scholar 1(2%) was staying in relative home. With the reference to the medium of language previously studied, 46 (92%) had Tamil as medium language and 4 (8%) had English as medium of language.
- Among 50 samples, 28(56%) were interested in studying B.Sc nursing and 22 (44%) were not interested in studying B.Sc(N) Course. Regarding their health problem, 30 (60%) had health problem, 20(40%) had no issues in health status. Regarding their friends status 3(6%) had no friends, 4(8%) had 2 friends, 43(86%) had above 3 friends. In their adjustment status, 38 (76%)

have adjustment problem and 12 (24%) doesn't have adjustment problem. regarding home sick, 34 (68%) had homesick, 16 (32%) doesn't have homesick.

- With respond to the education of father, 8(16%) were illiterate, 12(24%) were primary education, 22 (44%) were higher education 8 (16%) were completed their degree . Regarding their mother education status, 16 (32%) were illiterate, 18 (36%) were primary education, 11(22%) were higher secondary, 4 (8%) were degree, 1(2%) were post degree
- Concerning to occupation of father 17 (34%) were farmer, 16(32%) were labour, 5(10%) were working in private company, 5(10%) had government job. Regarding mother occupation 22 (44%) were house wife, 10 (20%) were labour, 7(16%) were private job, 1(2%) were in Govt job.
- With the respond of monthly income of the family 7(14%) earns less than Rs5000, 33 (66%) were Rs5000-10000, 5(10%) earns Rs10001-15000, 5 (10%) earns above 15000. Regarding health issues of the family members 38(76%) have health problem, 12 (24%) earn no health issues.
- Regarding their social problems in family 20(40%) had father with alcoholic habit, 28 (56%) had financial burden 2 (4%) had no social issues in life.
- The major finding of this study were the majority 48 %(24) students having moderate level of stress, 52% (26) students having severe stress and nobody was in Low stress during pre test. During Post test 80 %(40) students were having low stress 20%(10) students were having moderate level of stress and no one were in perceived level of stress. In pre test mean score was 25.8 .in post test score was 10.76 .the mean difference was 15.04 and the standard deviation was 49. The degree of freedom 49,P at 0.05 level of significance the calculated t value .so the **hypothesis (H₁) was accepted**. The results proven that the gardening therapy was effective for reducing stress among students.
- With regards to association of students pre test of stress scores, study reveals that there is a significant association between the pre test level of stress score with their selected demographic variables, the chi square test was computed with regards to pre test level of stress, the obtained chi square value was 4.705,6.732,10.45,8.224,8.608and 15.75 at df (1,1,1,1,3,and4) was significant 0.05.So **Hence H₂ was accepted**.

Conclusion:

The study finding provides, the statistical evidence which clearly indicates that gardening therapy has significant effect on the level of stress among students.

Implications:

Nurse can implicate the gardening therapy to reduce the stress level among students. The present study had several implications in nursing practice ,nursing education, nursing research, nursing administration.

Implications for Nursing Practice:

- The findings of the study enlighten that fact that gardening therapy can be used to reduce the stress level among the students residing in the college
- The study findings help the nursing personnel to include gardening therapy as a nursing intervention to reduce stress.
- It will enable the students to compare the gardening therapy with other therapies for reducing the stress among students.

Implications for Nursing Education:

- It will enhance the nursing students to acquire knowledge about gardening therapy in reducing stress and its uses in various physical and mental health problems.
- These activities should be added to the curriculum, so that the nursing students can come to know about gardening therapy and its effects in various mental health problems.

Implications for Nursing Administration:

- These findings will help the administrators to encourage the nurses to use a gardening therapy in reducing stress.
- These findings will help the administrators to arrange a continuing education program for nurses regarding stress management strategies
- Charts regarding the benefits of gardening therapy and gardening can be fixed in the hospitals , so that it can motivate the patient to practice it.

Implications for Nursing Research:

- The study can be a base line for future studies to build up on and motivate the investigators to conduct further studies.
- The nurse researcher can incorporate other stress reduction strategies in reducing stress which in future would widen the knowledge about stress and its management.

Recommendations:

On the basis of the findings of the study, the following recommendations are made for the future research.

1. A similar study can be replicated on a large sample with different demographic characteristics
2. A similar study can be done in different setting
3. A comparative study can be conducted to assess the effectiveness of gardening therapy on different age groups.
4. A similar study was conducted on a long term basis to prove the summative effect of gardening therapy.

Limitations of the Study:

- The study was conducted only on a limited number of students in selected settings; hence generalization is limited to the population under study.
- The study did not use a control group and there is a threat to internal validity as the investigator had no control over the events that took place between the pre and post test.

REFERENCES

BOOKS:

1. Anand N.K,et.al, (2011). Essential of mental health nursing. (2nd edition).New Delhi. AITBS publishers.
2. Bhatia M.S, (2007). A concise textbook on psychiatric nursing. (3rd edition) . New Delhi . CBS publishers and distributors.
3. Gail w.stuart, Michele T.Laria, (2008) . principles and practice of psychiatric nursing .(8th edition).Missouri. Mosby publications.
4. Karthi S, (2011) . Psychiatric terminologies . (1st edition).New Delhi . Emmess medical publishers.
5. Lalitha k, (2009). Mental Health and Psychaitric nursing. (1st edition). VMG Book House Publication.
6. Nambi S, (2003) . Psychiatry for nurses. (1st edition) .New delhi . Jaypee brother publications.
7. Neeraja .K.P, (2008). Essentials of mental health nursing. (1st edition). New delhi. Jaypee brother publications.
8. Sadock Benjamin James, (2009).Textbook of clinical psychiatry. New delhi .Wolters Kluwer (india) pvt.ltd.
9. Sreevani .R, (2008) .A guide to mental health and psychiatric nursing .(2nd edition) .New delhi, jaypee brother publications.
10. Sharma K suresh, (2014) . Nursing research and statistics. (2nd edition). Elsevier publication.
11. Townsend C Mary, (2011) .Text book of psychiatric mental health nursing.(6th edition) .FA Davis company publication.
12. Polit DF (2004).Nursing research and principles and methods.(7th edition).Lippincott.

JOURNALS:

1. Agarwal.S, Srivastava.N,(2013) .gender differences in stress among young adult. advance research journal of social science.
2. Anuradha.,(2014).laughter and health. journal of mental health nursing. 2(2).
3. Calvarese,M.,(2015). the effect of gender on stress factors. Open access social science.
4. Calaguas M G ,(2012). survey of college academic stressors. International journal of human science. 9(1).
5. Ickes J M .(2015). Differences between undergraduate and graduate students in stress and coping strategies. Californian journal of health promotion.
6. Indira .A,et level of stress among the 1st year B.Sc nursing students. retrieved from Narayana nursing journal.
7. kamal (2012). effectiveness of pranayama on stress reduction among software employees in selected settings at Bangalore .journal of psychiatric nursing.
8. Kumar.L,Akshara.P.V,(2015). effect of horticulture therapy on level of stress. international journal of science and research.
9. Nethra .S,et al (2017) (2017) level of perceived stress and coping strategies prevailing among I year undergraduates students. Retrieved from international journal of medicine and public health.
10. Patel,P., (2014). effect of progressive muscle relaxation therapy on stress among staff nurse working in selected hospital.
11. Pariat L, (2014) .stress level of college students :interrelationship between stressors and coping strategies. IOSR journal of humanities and social science.
12. Pradhan.M,Madnani.K, (2015). Psychological factors of academic stress among students. A international peer reviewed & referred scholarly research journal for interdisciplinary studies.
13. Revathi, (2014). effectiveness of positive behavior therapy upon stress among elderly depressive clients. journal of mental health nursing
14. Salomi js.,(2016). yoga on stress of institualized old age people. journal of mental health nursing 4(2).
15. Shalini,A.,(2013) .mind body exercise upon stress among special teachers. journal of mental health nursing. 1(2).

16. Waghachavare,B.V., (2013) .study of stress among students of professional colleges from an urban area in India. Retrieved from sultan qaboos university med j.
17. Wen k c (2011) .a study of stress sources among college students .journal of academic and business ethics.

NET REFERENCE:

1. <http://www.ijip.in>
2. [http:// www.ccsenet.org/ass](http://www.ccsenet.org/ass)
3. <http://www.digitalcommons.cedarville.edu>
4. <http://www.epratrust.com>
5. <http://www.acadjourn.org>
6. <http://www.doi.org>
7. <http://www.ijseas.com>
8. [http://www.mind garden.com](http://www.mindgarden.com)
9. <http://www.ijip.in>

APPENDIX -I
SECTION –A
DEMOGRAPHIC VARIABLES

Instructions: kindly read the following questions carefully and place a tick mark () against the appropriate response in the space provided.

Sample no:

Information Regarding Students:

1)Age in years

- a) 17-18 b) 19-20 c)21-22

2)Religion

- a) Hindu b) Christian c) Muslim

3) Type of family

- a) Nuclear b) Joint family c) Extended family

4) Place of residence

- a) Hostel b) Day scholar c) Paying guest d) In relative home

5) Medium of language previously studied

- a) Tamil b) English

6) Are you interested in studying B.Sc(N)

- a) Yes b) No

7) Where do you have any health problems if yes mention

- a) Yes..... b) No

8) How many friends do you have?

- a) 0 b)1 c) 2 d) Above 3

9) Do you have any adjustment problems with your friends

- a) Yes b) No

10) Do you have feeling of home Sick

- a) Yes b) No

Information Regarding Students Parents:

1) Father educational status

- a) Illiterate b) Primary c) Higher secondary d) Degree e) Post degree

2) Father's occupation

- a) Farmer b) Labour c) Private job d) Govt job

3) Mother educational status

- a) Illiterate b) Primary c) Higher secondary d) Degree e) Post degree

4) Mother's occupation

- a) House wife b) Labour c) Private job d) Govt job

5) Monthly income of your family

- a) Less than Rs 5000 b) Rs5000-10000 c) Rs10001-15000
d) Above Rs15000

6) Do you have any health issues in your family members if yes mention

- a) Yes..... b) No

7) Whether do you have any social problems in your family

- a) Father alcoholic b) Divorced parents c) Adopted child
d) Financial burden e) None

SECTION B

PERCEIVED STRESS SCALE

S.No	Questions	Never	Almost Never	Sometimes	Fairly Often	Very Often
1.	In the last month, how often have you been upset because of something that happened unexpectedly?					
2.	In the last month, how often have you felt that you were unable to control the important things in your life?					
3.	In the last month, how often have you felt nervous and “stressed”?					
4.	In the last month, how often have you felt confident about your ability to handle your personal problems?					
5.	In the last month, how often have you felt that things were going your way?					
6.	In the last month, how often have you found that you could not cope with all the things that you had to do?					
7.	In the last month, how often have you been able to control irritations in your life?					
8.	In the last month, how often have you felt that you were on top of things?					
9.	In the last month, how often have you been angered because of things that happened that were outside of your control?					
10.	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?					

Interpretation of PSS score:

- ❖ Score ranging from 0-13 would be considered low stress.
- ❖ Score ranging from 14-26 would be considered moderate stress
- ❖ Score ranging from 27-40 would be considered high perceived stress

APPENDIX -II

GARDENING THERAPY

Introduction

Horticultural therapy is a time-proven practice. The therapeutic benefits of garden environments have been documented since ancient times. In the 19th century, Dr. Benjamin Rush, a signer of the Declaration of Independence and recognized as the "Father of American Psychiatry," was first to document the positive effect working in the garden had on individuals with mental illness. In the 1940s and 1950s, rehabilitative care of hospitalized war veterans significantly expanded acceptance of the practice. No longer limited to treating mental illness, horticultural therapy practice gained in credibility and was embraced for a much wider range of diagnoses and therapeutic options. Today, horticultural therapy is accepted as a beneficial and effective therapeutic modality. It is widely used within a broad range of rehabilitative, vocational, and community settings.

Therapeutic horticulture (TH) is the use of horticulture by individuals for self, by leaders of groups, or one-to-one activity for physical, emotional, cognitive and social benefits in recreation, leisure, vocational and social programs. Each of us may realize the therapeutic benefit of gardening when we putter in the garden or care for our houseplants.

Meaning of gardening therapy

A therapeutic garden is a plant-dominated environment purposefully designed to facilitate interaction with the healing elements of nature. Interactions can be passive or active depending on the garden design and users' needs. There are many sub-types of therapeutic gardens including healing gardens, enabling gardens, rehabilitation gardens, and restorative gardens.

Steps in gardening therapy:

➤ Preparing the soil:

Healthy soil is the basis of healthy plants and a healthy environment. When garden soil is in good shape there is less need for fertilizers or pesticides.

“When building soil you not only improve your plants health, but you can also improve your own.”

➤ **Plowing:**

Plowing the soil in your garden is important if you want crops to thrive. Although loosening and turning over the soil by hand can be a tiresome task, it promotes aeration and allows plant roots to penetrate the soil and grow freely. Plowing can be done in fall and spring. Fall plowing is especially beneficial if the soil is heavy or you want to incorporate amendments that might take a while to have an effect. If the soil is porous and light, a single plowing in spring before starting your crops is enough.

➤ **Residents watering:**

A *therapeutic garden* is an outdoor *garden* space that has been specifically designed to meet ... residences, and other related healthcare and *residential* environments. ... Issues related to sustainability of the *garden*, such as using native plants a rain *water* harvesting, should also be considered in the overall design.

➤ **Choosing various vegetables:**

Most vegetables are started from seed or transplants. Seed can be sown directly into the garden soil, while transplants are started elsewhere and later planted into the gard

Vegetable gardening offers many benefits, including sun, fresh air, exercise, mental therapy, nutritious fresh vegetables, and economic savings. Vegetables can be grown year-round in Florida if you pay attention to the appropriate planting dates.

➤ **Reaping the harvest / vegetables:**

The job is not done until top quality vegetables are harvested from the garden. When the “fruits” of your labor are tasted, then it will be worth all the effort. Most vegetables are at peak quality for only a short period of time and should be harvested. Learn to tell the proper time to harvest each crop. Immature vegetables will not improve after harvest and over mature vegetables will be tough and lack the desired

Benefits of gardening therapy:**Physical benefits:**

- ❖ Exercise hands, fingers, arms and upper body
- ❖ Motivate the client to walk, stoop, bend, reach and maintain balance.
- ❖ Gives mild to moderate exercise in coordination, strength, stamina and physical activity when frequently nothing else will.
- ❖ Gives enormous pleasure through the senses; seeing, smelling, feeling, tasting and hearing.
- ❖ Motivates clients to use adaptive equipment as needed
- ❖ Provides pleasurable physical activity for those with physical disabilities or sensory impairments who wish to enjoy gardening in any setting.

Cognitive benefits:

- ❖ Helps to increase orientation.
- ❖ Exercises the attention span.
- ❖ Gives practice in following directions.
- ❖ Exercises the mind in terms of memory, logic and safety judgment.
- ❖ Increases interest in gardening and the natural world.
- ❖ Teaches new skills and techniques in horticulture.
- ❖ Stimulates understanding of such abstract concepts as time, growth, death and change.
- ❖ Gives greater awareness of living things around us.

Social benefits:

- ❖ Promotes interaction by providing a common interest to discuss.
- ❖ Improves social skills, self-esteem and confidence
- ❖ Gives practice in expressing opinions, formulating descriptions, asking questions, and exploring our sense of humor.
- ❖ Helps clients learn more effective work attitudes and behaviors.
- ❖ Motivates clients to work cooperatively with other people as a team.
- ❖ Promotes healthy interdependence.
- ❖ Allows clients to practice leadership and to become comfortable teaching others.

- ❖ Lets clients explore horticulture as a hobby.
- ❖ Lends itself to many social activities; clubs, garden socials, contests, special meals, cultural celebrations and parties.
- ❖ Gives reason to go on field trips and getting to know the community better; garden-related businesses, greenhouses, nurseries, botanical gardens, parks and recreational gardens

Psychological benefits:

- ❖ Helps rebuild self-esteem.
- ❖ Provides opportunities to relieve tension, frustration and aggression
- ❖ Promotes interest and enthusiasm for the future
- ❖ Provides opportunity for creativity and self-expression.
- ❖ Success-oriented activity builds a “can-do” attitude.
- ❖ Satisfies some of the client’s needs to be nurturing and caring.
- ❖ Enhanced skills for greater independence.
- ❖ Lifts the spirits of those who have little sense of purpose or hope through isolation and loss due to illness, accident, disease process, retirement or bereavement.

APPENDIX -III
IMAGES OF GARDENING THERAPY





APPENDIX IV
PERMISSION LETTER FOR CONDUCTION OF STUDY

From

Mrs G.Selvi,
M.Sc(N) II year Student,
RASS Academy College of Nursing,
Poovanthi, Sivagangai District.

To

The Managing Director,
Srinivasa hospital,
Madurai

Respected Sir,

I am Mrs.G.Selvi, doing M.Sc(Nursing) in RASS Academy College of Nursing, Poovanthi, Sivagangai District, affiliated to the Tamilnadu Dr.MGR.Medical University, Chennai. As part of my curriculum, I am conducting a research study on the topic:

“ Quasi experimental study to assess the effect of Gardening therapy on reducing the level of stress among B.Sc nursing I year students in RASS Academy college of nursing

The purpose of this study is to educate the effect of gardening therapy to relieve stress. I request you to grant permission

Thanking you

Yours Faithfully,

APPENDIX V

LIST OF EXPERTS CODUCTED FOR CONTENT VALIDITY

1. Dr.RAMANUJAM ,M.B.B.S.,D.P.M.,MD.(Psy),FIPS

Professor of Psychiatry and Senior Surgeon
Vellammal Medical College Hospital
Madurai.

2. PROF.H.UMMUL HAPIPA, M.Sc(N)

Principal,
RASS Academy College of Nursing,
Sivagangai – 630611

3. MS.NANZY FLOMINA, M.Sc(N).,

HOD of Mental Health Nursing
RASS Academy College of Nursing,
Poovanthi.

4. MS.Rathi. M.Sc(N).,

Dept of Mental Health Nursing
RASS Academy College of Nursing,
Poovanthi.

5. MS.ANUSHYA, M.Sc(N).,

HOD of Mental Health Nursing
Matha College of Nursing,
Manamadurai.

6. MS.Deepa, M.Sc(N).,

Dept of Mental Health Nursing
Apollo College of Nursing,
Poovanthi.



APPENDIX VI

RASS ACADEMY COLLEGE OF NURSING

Approved By Govt. of TNC & INC - Affiliated with Dr. M.G.R. Medical University

ETHICAL COMMITTEE

The following members of the ethics committee were present at the meeting held on 28.07.2016 at 2.30 pm in RASS Academy College of Nursing, Poovanthi.

CHAIR PERSON

1. Dr.RAMANUJAM ,M.B.B.S.,D.P.M.,MD.(Psy),FIPS

Professor of Psychiatry and Senior Surgeon

Vellammal Medical College Hospital

Madurai.

DEPUTY CHAIRMAN

2. PROF.H.UMMUL HAPIPA, M.Sc(N)

Principal,

RASS Academy College of Nursing, Sivagangai – 630611

MEMBER SECRETARY

3. PROF.MRS.VIJAYA KAMU, M.Sc(N)

Vice Principal,

RASS Academy College of Nursing, Sivagangai – 630611

MEMBERS

4. PROF.MRS.T.KARTHIHA, M.Sc(N)

HOD, Community Health Nursing,

RASS Academy College of Nursing, Sivagangai – 630611

5. ASSO PROF.MRS.M.VISALATCHI, M.Sc(N)

HOD, Medical Surgical Nursing,

RASS Academy College of Nursing, Sivagangai – 630611

6. ASSO PROF.SUDHA.K.N, M.Sc(N)

HOD, Obstetrical and Gynaecological Nursing,

RASS Academy College of Nursing, Sivagangai – 630611

Sivagangai Road, Poovanthi - 630 611. ☎ 0452 6592950

Administrative Office

25, Sivagangai Road, Near Anna Bus Stand, Madurai 20. ☎ 0452 4394440 8903012804 Email: rassacademycon@yahoo.com Web: www.rassacademy.com



RASS ACADEMY COLLEGE OF NURSING

Approved By Govt. of TNC & INC - Affiliated with Dr. M.G.R. Medical University

RESOLUTION – 2/2017

It is resolved to accept Mrs.G.Selvi to conduct an quasi experimental study to assess the effect of gardening therapy on reducing the level of stress among B.Sc (N) I Year students in RASS Academy college of nursing at Poovanthi

The institutional Ethics Committee expects to be informed about the progress of the study. Any changes in the protocol, patient information and asks to be provided a copy of the final report.

Yours Sincerely,

Yours Sincerely,

Chair Person

Deputy Chairman

Ethics Committee

Ethics Committee

APPENDIX -VII

PHOTOGRAPHIC EVIDENCE OF THERAPY





